

*UNDER THE SUPERINTENDENCE OF THE SOCIETY FOR THE
DIFFUSION OF USEFUL KNOWLEDGE.*

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NOTICE.

THE Committee of the Society for the Diffusion of Useful Knowledge are desirous of explaining the degree of superintendence which they think that they ought to exercise with respect to this publication.

It will of course be their duty not to sanction anything inconsistent with the general principles of the Society. Subject, however, to this general superintendence, they feel that the objects of the Society will be better forwarded by placing before the readers of this work the sentiments of able and liberal men, and thus enabling them to form their own conclusions, as well from the difference as from the agreement of the writers, than by proposing to them, as if from authority, any fixed rule of judgment, or one uniform set of opinions. It would also be inconsistent with the respect which the Committee entertain for the persons engaged in the preparation of these papers, were they to require them strictly to submit their own opinions to any rule that should be prescribed to them. If, therefore, the general effect of a paper be favourable to the objects of the Society, the Committee will feel themselves at liberty to direct its publication: the details must be the author's alone, and the opinions expressed on each particular question must be considered as his, and not those of the Committee. As they do not profess to make themselves answerable for the details of each particular essay, they cannot, of course, undertake for the exact conformity of the representations which different authors may make of the same facts; nor, indeed, do they, for the reasons already given, feel that such conformity is requisite.

By Order of the Committee,

THOMAS COATES, *Secretary.*

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JOURNAL OF EDUCATION.

THE present will be the last Number of the Quarterly Journal of Education. This Journal has now existed for five years, a time long enough to show whether a work of this description can be maintained on the usual commercial footing of such publications, that of paying its expenses. This expectation was hardly entertained at the time when the publication was resolved on, and the experience of twenty Numbers has proved that the demand for a work of this nature, and at the price fixed, is not sufficient to meet the expenses incident to it.

Various reasons may be assigned for the want of sufficient sale, according to a man's opinions or his prejudices ; but the main reasons may without difficulty be discovered, and as they are intimately connected with the general question of education, they may be conveniently explained at the same time that the termination of the Journal is announced.

It is well known to all who are acquainted with the book-trade, that it is exceedingly difficult to establish a periodical publication of any kind, and that all such undertakings involve a considerable outlay, and are often accompanied with heavy loss. There are two kinds of periodical publications which may succeed, and at present, perhaps, no more : these are religious and political periodicals. Though publications of this class contain other matters besides those merely of religion, or merely of politics, they are distinguished from other kinds of publications by these respective marks or general characters, and it is as being of this or that character that they obtain an extensive circulation, and not as occasionally containing other matter. In this country considerable freedom of opinion in political discussion, and some freedom of opinion in religious discussion, have long been established. Nearly all persons take some interest in the political events both of our own and foreign countries, and being split into opposite parties, they require some periodical publication which shall be the common expression of their wishes and opinions. Religious parties, which are more numerous than political parties, require also their respective organs, which serve to maintain a uniformity of opinion, and to give the word of command when a general and simultaneous movement is neces-

sary. Publications of these two kinds, however ably or honestly conducted, do, in the present state of society, appeal very largely to the passions and prejudices of men. These feelings, like many others of the same and of different kinds, being universal, are of the nature of urgent wants or desires, which require to be satisfied; and whatever is adapted to satisfy them is, for a time at least, secure of the favour of a very large majority of the community.

Periodical publications which are addressed solely to the understanding, the object of which is to communicate the results of laborious research, to deduce general principles in physical, political, or any other branch of science, do not in this country, and hardly perhaps in any country, command an extensive sale. The number who can understand them, or whose education has given them a taste for such reading, is comparatively small.

A *Journal of Education* is a publication of this class, its object being to collect such facts as compose the annals or the history of education, to ascertain those general principles which should direct the education of all classes, and to point out the means of reducing them to practice. Some years ago, but hardly within the last twenty years, it might have been disputed in this country whether national education was a matter of such concern as to be worth any serious discussion; and in such a state of opinion, a *Journal of Education*, if one had existed, could hardly fail to have expressed opinions, which should assail prejudices, and excite angry feelings.

The importance of education being now a thing agreed on and settled,—and unfortunately settled in the minds of many, like other opinions, without the reasons for them—it remains to say—what shall education be, and how shall it be managed? A journal which shall discuss this matter must also unavoidably, and even without seeking for occasions, offend many prejudices. The *Journal of Education* has no doubt often done this, and to a certain extent its sale may have depended on the same general principles as those which mainly create the larger demand for religious and political publications. That it has not, however, derived much advantage in the way of sale from gratifying passions, appears from the small number of copies sold, which has never exceeded 1200 of any one number. To those who are acquainted with the book, it will be obvious from a consideration of the great mass of its contents, that nothing could be less adapted to please a mere partisan, whether in matters of faith, or any matter else, and that a large part of the book must always be, to persons not

sincerely convinced of the importance of education, and anxiously bent on improving it—dry, wearisome, and sometimes unintelligible. What has been said, contains some of the reasons why neither this *Journal of Education* nor any other can at present command a large sale. The term ‘large’ is indeed here understood in a relative sense. The sale of the *Journal* has been very small compared with that of many periodicals, but it is not a small sale, considering the high price of the book, and the small number of persons who are earnest in the matter of education. It is a circumstance in its history which ought to be recorded in connexion with its limited circulation, that ever since their publication the several numbers have been constantly selling, and are still selling as any book, not a periodical, would do. This seems to show that the number of persons who think about education is continually increasing, and that they find in the *Journal*, at least a fair portion of matter which may be considered as possessing a permanent value.

It is not our design to say anything of the mode in which this *Journal* has been conducted, or of the success which has attended our attempts to improve education. Those who have thought much on the subject, and have viewed it in all or most of its various aspects, will neither be disposed to set too high a value on their own labours, nor to underrate the labours of others in the same field. If any one should find in this *Journal*, both matter for approbation and disapprobation, he must know that what is best is either the work of a few hands who have laboured regularly since the commencement, or has come from a few individuals whom a variety of circumstances prevented from making more than a single contribution or two on such subjects as fell within their peculiar province. As to what may be less worthy of approbation, it may be sufficient to remark, that the difficulty of finding good materials for any journal, and most of all for a journal of this kind, cannot be estimated before the experiment is made, and cannot well be conceived except by those who have tried it.

If there were a general and profound conviction of the importance of education, rightly understood, and of the improvements which are requisite in the education of all classes, in order to give them the best opportunity of attaining happiness, such a journal as this, and many more having the same object, would be easily supported. But such a general conviction does not exist. As in matters of religion, so in education, many assent to doctrines and principles, but few are in earnest about them. If such a conviction cannot be produced among the

middle classes in this country, we can hardly expect under our present constitutional forms, ever to see education assume the rank due to its importance, and receive all the ameliorations of which it is susceptible. Though our constitutional forms are such as to prevent much good from being accomplished, whenever the change that must precede the attainment of this good is opposed to the interests or prejudices of a small number in the possession of political power—it must also be admitted that the many often mistake their own real interest, and would resist measures which every thinking man knows to be for the interest of the whole community. Such is the case with respect to education. If any administration were to devise the best possible system of general education that our actual knowledge enables us to form, it would meet with opposition from many parties, and on grounds as various as those on which the parties differ among themselves. In the present state of opinion then, no administration could do all that ought to be done for education; but any administration possessing a reasonable amount of desire to do the best in its power, and good sense to frame proper measures, might take such steps as would gradually, and perhaps soon, render the whole education of the country subject to the general direction and supervision of the state. And here we shall briefly notice an objection which is often made to this control being exercised by the state: it is said that the state, or that body which we call the government, might make education an instrument for bad purposes. Some people even deny the right of the state to interfere with education, but as these people do not know what they intend to say, and as their objection, when interpreted in any way that has a meaning, comes to the same thing as the other, one answer will be sufficient for both. The sovereign power in a state, being supreme, is itself beyond all control: if it acts contrary to what is called public opinion, or the positive morality of the country, or if its measures are really injurious, there is no legal remedy: a dissolution of the frame of government, and the re-arrangement of the parts, are the only ultimate remedies. Where all, or nearly all the sovereign power resides in an individual, it must be admitted that the sovereign might be strong enough to compel the people to a bad course of education, to a course of positive instruction which should be more injurious to them than none at all. Such, however, is a very extreme supposition. If the sovereign compels the people to anything that is really education, that is, to anything which affects to have for its object the improvement of the intellect and the morals of

the people, it must follow that something at least of what is taught, and that some part at least of the discipline must tend in some degree to give habits of industry and application, and to develop the understanding. At the same time much that is taught might be positively pernicious, though we can never imagine anything to be taught by authority under such a system as pernicious in itself: it would be taught as a thing good to teach, though it might in fact be a bad thing. That the kind of check imposed on the sovereign power by the deference to public opinion implied in the 'professing to do good,' is a real check, and to a considerable amount, will be obvious to all who know how the course of human actions is influenced by opinion. If we look to those countries in Europe where the sovereign power resides in an individual; if we look even to Russia and see what has been done, and is now doing by the state for the improvement of both the higher and the lower classes, it is undeniable, that in a country so extensive, so comparatively poor, and composed of such ill-assorted materials, anything like the same amount of good could not have been accomplished without the help of the state. The sovereign may care little for the general good, but the pressure of external civilization, and even his own interests, drive him to do many things which are for the public interest also.

In this country the matter is not so simple, owing to the distribution of sovereign power, which distribution, while it may prevent some bad measures from being carried, is constantly opposing obstacles to good ones. It would appear to a careful and unprejudiced observer that our constitutional forms are at present extremely ill-adapted to promote measures tending to the general interests of the country. The various members of the sovereign power, and the various interests, as they are called, which exert their influence on the sovereign power, are continually elbowing and jostling one another like people in a crowd. Some are for going one way, some another, and if each does not actively oppose his neighbour's course, he is unavoidably thrown in his way while he seeks his own. While the elbowing and jostling continue, each striving to go a different way, it is hopeless to think of doing anything at all, but to get out of the confusion. Such a government as this, if it is here rightly described, can do no good if it attempt at once an entire reformation of education. When we speak then of government re-modelling and directing all the institutions for education, we mean a government which—if not possessing all the unity that we could desire, and all the identity with the universal

good that is necessary to accomplish everything—has at least within it one element strong enough to do nearly everything that sound judgment and honest intention point out. Such an element should be the House of Commons: it is there, or nowhere, that we must look for help. In what degree the House of Commons is approaching that character in which it will be found competent to enter on this difficult subject, we cannot undertake to say. It now contains many well-informed men who are zealous to do all that is practicable for the general improvement of education; but a majority of such men it certainly does not contain. Those who are friends to a national system of education, and on rational grounds, must hope to see the House of Commons well enough informed, and strong enough to carry into effect all undoubtedly useful measures, in spite of any opposition from the other members of the sovereign power. If they do not hope for this, if they do not see the necessity of this, they do not understand the state of the question. In any government constituted as ours just now is, a government in which the theory of the balance of power, as it is termed, is reduced to actual operation, any administration is sure to find obstacles thrown in the way even of the very best concerted schemes for improvement, and cannot safely or honourably attempt, just at present, a complete reform of education. If such a government did not abuse its power directly, it would be led to do it indirectly. Its objects in education would be incongruous and ill-defined: they would be the objects of parties and sects; they could only be accomplished by mutual concessions, often involving the surrender of important principles—of all which we have examples in the little that government has hitherto done and attempted, or talked of doing in England and Wales*. A House of Commons being elected by the people, is supposed to be a body which will do nothing, not believed to be for the general interest. In the matter of education, it is difficult to suppose a House of Commons doing anything, the object of which should be to put the people in a worse state than they now are. A House of Commons might take unwise steps, against which there is no direct security; but it does not seem to us that any good

* Ireland is partly an exception. It seems singular that England cannot have the advantage of a system of education like that of Ireland, where, under circumstances at first sight far from favourable, the government measures have been attended with considerable success.—See *Journal of Education*, No. V. p. 189; No. XVIII. p. 193. See further measures proposed and explained in the speech of Thomas Wyse, M. P., in the House of Commons, May 19, 1835, on moving for leave to bring in a bill for the establishment of a Board of National Education, &c., in Ireland; and see the Bill printed by order of the House of Commons. Dublin: Milliken and Son, 1835.

reason can be urged for supposing that a House of Commons, chosen by the mass of the people, is ever likely to attempt anything for education, which it should not judge to be conducive to the general interest, and which should not be considered beneficial by a considerable majority of their electors.

The direct advantages that would result from the state endeavouring to improve the education of the community, may, perhaps, be most clearly shown by stating some of the obvious disadvantages as things are at present. All, or nearly all of these disadvantages would be got rid of by a few simple measures. To take a particular instance; the education of the blind is a subject comparatively new. There are now several schools in various parts of the United Kingdom, and in several of the large towns. Those who have given little consideration to the subject of common education, are not always ready to admit that education is a science and an art, requiring a study and a discipline in order to understand the science and practise the art. But in the case of the education of the blind, where a difficulty at once arises in consequence of the pupil not possessing one of the senses by means of which knowledge is acquired, all must of necessity admit that something new must be devised, that all the methods used for teaching those who can see, will not do for those who cannot see. Hence arises the necessity for invention in order to meet the new difficulty. But these schools for the Blind are situated at a great distance from one another: there is no communication between them except by occasional visits; and no knowledge by one school of what is doing in another, except from such visits, or from the periodical publication of their reports. Besides these very insufficient means, and so much of unity as is necessarily inherent in the methods for teaching the Blind, derived from the adoption of certain common principles and the use of some of the best books on the subject, there is no other communication between these several bodies. It is a necessary consequence that one of these schools may be very inferior to another, that one school may be still following old modes of teaching, which in another school have given place to more approved methods. This is the actual case with the schools for the Blind, and there is no remedy for the defect but the establishment of some central school which shall be a nursery of masters, and a storehouse for the accumulation and distribution of all the experience of the best teachers in the kingdom.* Such a centre of union can only be established by an association of individuals, or by the state.

* See some valuable remarks on this subject in the article 'Blind,' in the Penny Cyclopædia.

In the instance here chosen, it would be in the power of the state to take such measures, that all the schools should be in possession of all the best methods yet known. This of course would be effected by providing a school in which persons should be educated as teachers of the Blind, and by not allowing any person to be eligible to a school who had not obtained a sufficient education in the central school. Advantages similar in kind, and hardly less in degree, would probably result from similar institutions for general education, established by and under the direction of government. Competent teachers are wanted for all classes. If a few normal schools were established by the state, and administered on sound principles, we can hardly doubt that in a short time the demand for teachers out of these schools would far exceed the means of the schools to supply them; a circumstance which would necessarily lead to ulterior measures.

As education is now admitted to be a thing of primary importance, even by those who were once opposed to it, let us briefly consider the various general modes of educating a whole country. We shall not consider what education should be, for that is a subject almost unlimited: we shall consider how and by whom education ought to be administered, for this question actually contains within it the other. If education is administered in the way in which it ought to be administered, the right education will in time be discovered. If it is in the hands of those who are unfit to administer it, education never can be what it ought to be—the preparation of all classes for the duties of social life.

Education may either be left entirely to individual speculation, or be directed by societies, or be under the direction of the state. In this country education is partly in the first, and partly in the second of these predicaments; and partly also, though not generally considered to be, under the direction of the state.

It may be asked why the education of all classes is not left entirely to individual speculation like any other branch of industry. The reasons seem to be various. As to the children of the very poorest class, they would now get no education at all but for the bequests of individuals, and the efforts of religious sects. And if the poor are to have any good education it must be effected either through the care of the government, or by individual societies. We have already considered the objection that may be made to the government undertaking this matter. The same kind of objection seems to apply to societies, and with much more weight. The education of the poor, as conducted by societies, has for its main, we might

perhaps say its sole object, to bring up the children of the several sects in the religious tenets of the sect, and to a certain extent to gain proselytes*. With this view societies may, and sometimes do, resort to means, which will be disapproved of by every reflecting man: their end being narrowed and limited, the education is in accordance with it, narrow and limited also; and owing to the little communication that exists between these several societies, the schools of one society may be much in advance of the schools of others in all modes of communicating even such instruction as is given. Something might be said on the head of expense, which would be much diminished by all the several societies uniting their funds.

But such a union can only be effected under the state, which should also contribute towards the expenses of the schools. The difficulty which the State would experience in effecting this union is in the religious prejudices of the several societies. But as the attempt has never been seriously made in England to unite all the poor in one common education, leaving to the several religious parties the religious education of their children, it can hardly be said that even under present circumstances such a thing would be impracticable. The measure would be attended with difficulties, and would no doubt be defective, but it has never yet been shown that this might not now be done to a limited extent, by any administration seriously desirous to do it.

The education of the middle and upper classes is either left to individual speculation, or conducted in places founded by the donations of private individuals, or of the kings of England. Most people wish the education of these classes to remain just as it is, with respect to the superintendence of the State. The reasons why it is not for the interest of any person that it should remain as it is, are few and simple. Education thus distributed and disconnected cannot attain the same degree of excellence as in those countries where it is all in harmony with a well-concerted scheme. Further, education being a thing of which few parents are competent judges, and which all desire in some degree to give to their children, a wide field is open to impostors and ignorant persons for deceiving the community by undertaking the business of schoolmaster. In a country where externals, and especially the external indications of wealth, and the external show of religion, command such immediate respect, an impudent adventurer, with a little money, or a little credit, has

* The British and Foreign School Society is an exception to this remark. There may be other exceptions, but we do not know them.

a better chance of success than a modest well-informed man, who is unpractised in the art of dealing with the world. For these and other obvious disadvantages there is no remedy except in the middle and upper classes being so well-informed as to be competent judges of a master's qualifications, or else in the state taking some means of enabling them to know the true from the false man. The first remedy is hopeless, as it clearly depends on the kind of instruction which people receive, and as this at present is often in bad hands, it is not reasonable to suppose that they will let it be of a kind which will ultimately expose the incompetency of those who profit by it. The remedy which it is in the power of the state to apply, is to allow no man to teach, as she allows no man to attempt to cure, without having had a proper education. This measure is open to the same objection that has been mentioned before: the power might be abused. It is true that it might sometimes be ill used, but under a well-organized system it could not be often abused. Such a law would by some be called an infringement of liberty; in which respect, however, it would only be like many other kinds of restraints, the nature of which must be determined by a full consideration of all the circumstances, and not be decided by a well-sounding phrase, or a word without a meaning. A man may call in anybody he pleases as his doctor; if, however, the man dies under a quack's hands, the law wisely punishes him for his ignorance and presumption. The remedy, in case of a schoolmaster either not teaching what he undertakes to teach, or allowing his pupils to form bad habits, is not so obvious; and there is, therefore, the greater reason why he should be prevented from opening a school at all, unless first pronounced by the State to be a competent person.*

The education provided by funds left by individuals or given for this purpose by the kings of England, has hitherto not been considered to be under the superintendence of the State. But this is an erroneous view of the matter, and requires to be set right. The property belonging to these schools is in the hands of trustees, frequently forming corporate bodies; but whether or not, in all cases they are liable to be called to account, either in courts of law or equity, for mis-administration of the funds, and (where there is not a special visitor) for not complying with the will of

* The modes of doing this are various. The best mode would be that which should least offend prejudices. In the case of private schools, it might be a sufficient check on adventurers, if the names of all the schoolmasters in a given district were annually published, with a mark distinguishing those who had obtained a certificate of competency from those who had not. In the case of endowed schools, all uncertified persons should be ineligible.

the donor as to the nature of the instruction given. The sovereign power exercises through the courts, to whom it delegates part of its powers, a superintendence and control over these schools to a certain extent and in a certain way; and to this extent and in this way all the charitable institutions of the kingdom are under the superintendence of the State. These corporations, which are trustees for charitable funds, being creatures of the sovereign power, and under its control and superintendence, may, consistently with all notions of positive morality, be re-modelled and changed whenever the usefulness of the institution can be thus extended.

At present the superintendence of the State is limited in the way already described. Other kinds of superintendence (as to internal management) are exercised by visitors, who are either the heirs of the founders, or some person or persons named by the founder, or in the case of most royal foundations, and where there is no heir of the founder, the King. The King exercises his visitorial functions through the Court of Chancery: other visitors sometimes exercise that power, and sometimes do not; in general they do not even know accurately what the powers are with which they are invested.

Setting aside all disputes as to powers and rights belonging to individuals or corporate bodies, it will hardly be denied that the State, by means of a proper functionary, could exercise a much more direct and efficient control than is now exercised in the ways already mentioned. It could also by reforming the Statutes, adapt the schools at once to the changed circumstances of the various places in which they are situated, and lay down a general system of instruction suited to the wants of the people and to the polity of the State. Whenever disputes arise among the immediate governors of such schools as to the funds, they could be soon settled by a competent authority, without having recourse to the expensive proceedings in Equity*.

The principle of re-modelling the endowed schools of England has been recognized in individual cases. Nothing new will be done in applying the same principle of extending the objects of the charity†, which has been already carried

* Besides litigation, the property of small charities is injured in another way. 'It often happens that a new trust-deed will exhaust the income of two or three years.'—Mr. Grant's Evidence before the Select Committee on Public Charities.

† See an Act intituled, 'An Act to enable the Governors of the Possessions, Revenues, and Goods of the Free Grammar School of King Edward the Sixth, in Birmingham, in the county of Warwick, to erect a School House, Masters' Houses, and other suitable Accommodations for the said School; and to extend the Objects of the Charity, and for other purposes.' 23rd August, 1831.

into effect by the Act for the Birmingham Free Grammar School. By this Act, after providing for the building of a new grammar school, the governors are required to build 'a new school for teaching modern languages, the arts, and sciences;' and further, 'within eight years after the passing this Act, to appropriate a sum, not exceeding 4000*l.*, in order to build and establish four schools for the elementary education of the male and female children of the poorer inhabitants of the town, parish, and manor of Birmingham,' &c. Such an extension of the objects of the charity, which will soon be rendered practicable by the increased value of the property, will make the foundation of Edward the Sixth much more useful; and there is no reason why a similar extension should not be given to the objects of all other schools when the revenues allow; or why an altogether different appropriation of the revenue should not be made in such places as require no grammar school and have only small funds. Instead of all the tedious and expensive proceedings in Chancery, followed, as in this instance, by the cost of an Act of Parliament, one single Act, well conceived, would provide for all cases. Such an Act, however, could only give general powers: it would be necessary to vest the administration of schools in one or more persons, who should be authorized to form a scheme of education and superintend the local governors. At present, in such a case as that of the Birmingham school, the new school for the arts and sciences is to be conducted according to schemes confirmed or approved of from time to time by the Court of Chancery. The settler and approver of such schemes is a Master in Chancery, whose professional pursuits are not of that nature as to render him peculiarly fitted for the discharge of such a duty.

Considerable powers must always be given to the local administrators of endowed schools; and when they shall all be chosen upon some general principle, and all be subject to the immediate control of the State or those to whom the State shall delegate the superintendence of such schools, it must be admitted that the direct supervision of these schools may be safely and perhaps profitably left to these local governors. The Act for the Birmingham School, while it places the school for arts and sciences, as just mentioned, under the direction of the Court of Chancery, leaves the power of making regulations for the four poor schools to the governors, 'with the advice of the bishop of the diocese for the time being.' The education of the poor is thus put completely in the hands of the bishop; for without his consent it will not be found practicable to do anything. This Bir-

mingham Act is valuable as containing the principle of completely remodelling a royal foundation: as a specimen of an Act for the real improvement of education, it is just the kind of thing to be looked for so long as legislation goes upon individual cases.

A bill was presented to the House of Lords, in the last session, by Lord Brougham, one object of which is to remedy some of the evils which we have pointed out*. This bill being of a general nature, and applicable to all charitable endowments for education in England and Wales, goes very far towards correcting many defects in the present administration of schools, so far as respects the application of the revenues. It would probably also lead to the foundation of numerous schools, such as those to be connected with the Birmingham Free School†. But the bill contains no provision for establishing any uniform system of education in all these schools; and there seems no reason for supposing that the three acting commissioners (three barristers) to whom it is proposed to give the powers contained in the bill, would be better qualified for the functions of promoting education than a Master in Chancery.

The recent Act for the regulation of Municipal Corporations in England and Wales, has declared (71), that 'whereas divers bodies corporate now stand seised or possessed of sundry hereditaments and personal estates in trust, in whole or in part, for certain charitable trusts, it is expedient that the administration thereof be kept distinct from that of the public stock and Borough Fund.' Provision is accordingly made that all the powers of such corporate bodies in respect of such uses and trusts shall cease and determine August 1, 1836; and if Parliament does not otherwise direct before August 1, 1836, the Lord Chancellor, or the commissioners of the Great Seal, shall make proper orders for the administration, subject to such charitable uses or trusts, of such trust estates. For this most important improvement in the Commons' Bill, we are indebted to the amendments of the Lords.

Such trusts, which are very numerous, being now taken out of the hands of corporate bodies, will require to be placed in other hands; and in doing this, it is to be hoped that the House of Commons is now at least fully aware of the importance of so regulating such charitable trusts, that they shall confer on the people of this kingdom all the benefits

* A Bill intituled, 'An Act for promoting Education and regulating Charities.' Ordered to be printed 3rd July, 1835.

† Materials for such new foundations exist in the revenues of Tunbridge School, Manchester Free Grammar School, and many others.

which under present circumstances are practicable. To do this it is essential that a general form of education, varying according to the wants of certain localities, be prescribed by authority for all these schools, that the class of persons out of whom masters shall be chosen be similarly* determined; and that persons shall have the opportunity of qualifying themselves to be included in this class by being educated in schools established for the purpose. As to the vesting of the funds, the superintendence of the schools, and all other matters of administration, it cannot we conceive be a matter of any difficulty so to arrange all these, as to avoid nearly all legal expense. Such an opportunity of reforming a large number of our grammar schools will, it is hoped, not be neglected. If all these schools are placed on a good footing, the advantage of the change will facilitate the introduction of a still larger measure of reform.

Besides the schools of royal foundation, and those for which the municipal corporate bodies are trustees, there is a great number of other schools, the trustees and governors of which form a corporate body of themselves; for other schools certain halls and colleges in the universities are either trustees or visitors; and there are other charities again where the trustees are not incorporated, some where there at present no trustees at all, and many where the trust-deeds are completely lost.

With respect to the schools hitherto visited by the commissioners for inquiring into charities, it is observed in the Report from the Select Committee on Public Charities,† that ‘the case of the Berkhamstead Grammar School, apart from its own peculiar circumstances, serves to illustrate the nature of the defects which pervade, in very many instances, similar institutions throughout the country, where, even though superintended by a special visitor, and administered under the court of equity, the master of the school‡ is practi-

* In the case of the Birmingham school the legislature has determined the class out of which the head master and usher must be chosen: the head master and usher must be graduates of one of the English Universities, Masters of Arts, and in orders. There will be nothing new in the principle of determining generally a class out of which masters of grammar schools should be chosen; only the class will be differently described. It should not exclude Masters of Arts of the English Universities, and it should not include any persons in Holy Orders. In doing this it would be following a sound principle of not letting a man who has one public function exercise another at the same time; and it would be nearer the principle of our old endowments, in a very large number of which no such regulation as to the masters being in orders exists. King Edward’s original charter for Birmingham school, as for his other schools, made no regulations on this matter.

† Communicated by the Commons to the Lords, 25th of August, 1835.

‡ The present master of the school is the Rev. Thomas Dupré, who succeeded

cally beyond any existing control, and the funds of the endowment are wasted by the costs and delay inseparable from legal proceedings.

‘In this case Your Committee find that a valuable institution, with large funds and appropriate premises, adequate to the free education of a great number of children, and the liberal maintenance of the necessary instructors, with a surplus fund which, rightly administered according to the design of the benevolent founder, would afford comfortable provision to many deserving objects, in all material circumstances the reverse of what it ought to be. Your Committee find a master and usher, the latter the son of the master, and appointed by him when a minor, the incorporated trustees of the charity property, receiving to their own use considerable stipends, the schoolhouse dilapidated, no boys on the foundation, and the surplus revenue so exhausted by law and other expenses as to leave an uncertain trifle for the relief of the poor.

‘To remedy such evils and abuses, and as a provision against their recurrence, your Committee confidently trust they have suggested a plan of permanent and responsible control, which cannot fail, if rightly carried into execution, to secure and extend the advantages of education, and the due application of all charitable funds to the objects contemplated by the founders, so far as such objects may be deemed beneficial to the community.’

The remedies suggested in the Report mainly refer to the funds of the different charities, (including schools,) and to the better administration of them. So far as they go, they are good*, but they contain no specific suggestions, which indeed it hardly fell within the duty of the Committee to make, for the improvement of education, as connected with these charities. This part of the subject requires a separate consideration, which it will doubtless receive, when the commissioners under the new Act†, (5 and 6 Will. IV. c. 71,) shall have completed their inquiries into the charities of England and Wales. But until these inquiries are completed, it would hardly be practicable to make any general provision for the

his father the Rev. Dr. Dupré. At the death of the late master, Dupré the elder, the usher was Mr. Michael Dupré, the uncle of the present master. The present usher is Mr. Samuel Dupré, aged 21, in October, 1834, appointed by his father, the Rev. Thomas Dupré, at Christmas, 1833. The master and usher form a corporation. See the examination contained in the ‘Report.’

* See in the ‘Report’ the valuable evidence of Mr. J. Wrottesley: the answer to 458 has special reference to a reform in education.

† An act for appointing commissioners to continue the inquiries concerning charities in England and Wales, until the 1st day of August, 1837.

better administration of all charitable funds left for the purposes of education. When they are completed, it will not only be practicable to introduce a thorough reform, but such a reform will be loudly called for by all who wish to see the education of England raised from its present low condition, and made what it ought to be, a fit preparation for social life, to which education, rightly understood, is the introduction.

Before the inquiries of the commissioners are terminated, more than twenty years will have elapsed from the time when Mr. Brougham, then member for Winchelsea, moved for the appointment of a Select Committee of the House of Commons 'to inquire into the state of education of the lower orders of the people in London, Westminster, and Southwark.' The labours of this committee, of which Mr. Brougham was chairman, led to the Act 58 Geo. III., 'for appointing commissioners to inquire concerning charities in England for the education of the poor.' Under this and subsequent acts the inquiries of the commissioners have been carried on. Various causes have hitherto prevented their labours from being completed so soon as was desirable, and have also rendered the information collected not easily accessible, and of course less useful than could be wished. Now however the commission is again fairly started, and on such terms, that after a lapse of twenty years, we shall at last know what are the immense resources which this country possesses for the education of the people. Certain foundations are excepted from the inquiries of the commissioners by the present bill; but these exceptions will not be any obstacle to our forming such a judgment as may lead to a measure of reform which will contain no exceptions. When the 'proper management and right application' of the charity funds, amounting altogether to about one million per annum, shall come under the consideration of the House of Commons, it will be seen that these are, as the committee in their Report describe them to be, 'matters of national concern, the more especially as the objects of their appropriation embrace, to a very large extent, the education and the comfort of the people.' It cannot then be said that this is a hurried measure of reform. For more than twenty years it will have been a subject of public discussion, and no one who knows the state of public opinion twenty years ago in England can be ignorant that about the year 1838, we shall be much better prepared for a complete consideration of this national question.

It is now known that the present government is employed in framing a constitution for a New University, which shall

confer degrees on all persons who, upon examination, shall be found competent.* This measure arose out of the application of the London university for a charter to empower that body to grant degrees. The two universities of Oxford and Cambridge, and various medical bodies in the metropolis, opposed this application. Independently of the opposition from Oxford and Cambridge, there were real difficulties in the way of giving a charter to the London university, which the government will avoid by the establishment of a university, so large and comprehensive in its design as to satisfy the urgent want of such an institution. It may be easy to raise objections to such a scheme, and it must be admitted that it is possible that serious errors may be committed both in the constitution of the new university and in its early administration; but a beginning must be made sometime, and as the necessity is urgent, it is best to begin immediately. A measure conceived in so enlarged and truly liberal spirit, and carried into effect, as we have no doubt it will be, with an earnest desire to do all for the best, cannot fail, in course of time, to accomplish the ends for which it is designed.

The New University will have at first nothing to give in the shape of direct profit to those who obtain degrees. In this respect Oxford and Cambridge will still have an advantage, but one which is more apparent than real. The new university must give its graduates something, and it is in the power of the State to furnish it with more to give them than all that the two universities possess; and that without the cost of a single farthing to the people, but on the contrary to the great advantage of the community. The State can and ought to require a certain kind of education in all persons who aspire to fill all offices under the State; and in order to determine whether a person has this qualification or not, to determine whether a man is eligible or not to such an office, a testimonial of such qualification, in the form of a degree granted by the New University would be all that is wanted. At present many places of great importance, and a vast number of others of less comparative importance, are filled by persons totally unqualified. Further, the state has now at its disposal the endowments for education, formerly vested in municipal corporations; and when the inquiries of the charity commissioners are completed, it will be necessary to do something with those endowments also which are not vested in municipal corporations. It will

* We are only enabled to state in a general way the character of this measure; and we may have stated it in terms too comprehensive, though we hope it will not turn out to be the case.

then be a useful measure to declare that no man shall be eligible to the mastership or ushership of a grammar school in England and Wales, unless he is a graduate of the New University, properly certified; or unless he be a graduate of Oxford or Cambridge. The graduates from the old and the new universities should, as to this, be on the same footing. But in order to take away all unfair advantage on the part of graduates from Oxford and Cambridge, persons in holy orders should be declared ineligible to the masterships or usherships of such schools, inasmuch as it has now become the practice to choose masters of grammar-schools only from among the clergy. Such a provision would tend to induce persons to qualify themselves for masterships of grammar-schools by a proper course of study and a proper amount of experience in teaching; whereas at present these masterships are mostly given to clergymen who do not seek to qualify themselves specially for them, and who leave them as soon as they can get any ecclesiastical promotion which is more valuable. There is indeed at present a considerable temptation to a man to be ordained in the established church, even if he dislikes its discipline and disbelieves its doctrines. Besides the certainty of some trifle at least in his profession, a certainty not to be had in any other profession, he has the chance of partaking in the advantages of numerous endowments: he may become half, and the better half, of a corporation, as in the case of the master of Berkhamstead* and the master

* In the Report of the Commissioners as to Berkhamstead school, it is said, — 'It seemed to be admitted by every one whom we examined, that a mere grammar-school education was not suited to the wants or wishes of the inhabitants of the parish, but some persons were, at the time of our inquiry, desirous of sending their sons to the school in the event of its being so remodelled as to combine a grammar education with an English course of instruction, and in June, 1830, the warden of All Souls, the visitor, endeavoured, but without success, to introduce such a change.' The visitor has since interfered. See the examination of Mr. Dupré before the committee of the House of Commons, July 20, 1835; and the letter of G. D. Ryder to the chairman of that committee, touching certain assertions of Mr. Dupré. Also the examination of Dr. Wood, &c., as to Pocklington school, Yorkshire, and the corporation thereof consisting of a master appointed by St. John's College, Cambridge, and an usher appointed by the master. In this case the visitatorial power of St. John's is rather of an ambiguous kind; but Dr. Wood exercised it as soon as he was informed of the master's neglect of his duty. See Reports from Committees: Education of the lower orders, 1818.

In this, as in many other instances, the mismanagement is a necessary consequence of the want of a proper system of superintendence and control. It is useless to blame individuals in such cases, even when they deserve blame. It is unjust to blame them, when, as is often the case, they have neither power to remedy actual abuses, nor to change the terms of an endowment, though the change will be an improvement. There is only one remedy, which is to place all the schools on the best possible footing, by changing the old rules, when they are bad, for new rules that are good, and placing all the schools under one general control.

of Pocklington, with power to manage the charity estates almost as he pleases, and with almost power enough to defy his visitor. He is still further invited to ordination by the rules of most of the new proprietary schools, which will be content with nothing less than a man in holy orders. With these institutions the State at present has nothing to do ; but it may be observed that this impolitic restriction, as to the qualifications of masters in those schools, appears to have had its origin in a desire to imitate the supposed rules of endowed schools. But in most, though not all, these endowed schools, it is not necessary that the master and usher be in orders : they may or they may not 'take priesthood.' The general provision is, that they must have no ecclesiastical duty which will interfere with their school duties. We do not know what effect the union of two functions in one person has had on the discharge of their clerical duties ; but it is well known, that many grammar schools have suffered grievously from having had clergymen for masters*. Any measure which does not exclude them from such places will be incomplete ; and the New University is specially interested in looking to this matter, with the view of opening the grammar schools to its own deserving graduates, by making them equally eligible with the graduates of Oxford and Cambridge.

This New University may become the centre of a completely organized system of education, under which institutions shall be formed for training teachers for all the various kinds of schools, required by the numerous and widely-varying wants of all classes of the people. Should its original plan not comprehend all that may be desired, we hardly doubt that in a few years it will be found an easy matter to extend its operations and increase its powers.

If we compare the actual state of education, as to the attainment of knowledge, with what it was twenty years ago, we may safely affirm that great improvements have been made. They have been brought about in a great variety of ways, and by numerous causes, which it is not our present purpose to investigate. If we compare the actual condition of education, as affected by the State, with what it was twenty years ago, there is no single measure that can be considered as even a beginning towards placing education, in England and Wales, under the direct control of the State. Various measures, however, which do contain something like the acknowledgment of a principle, have been carried of late years—such

* See Minutes of evidence taken before select committee on Public Charities, for a curious instance of difficulty arising in the case of the master of Coventry School, p. 14.

as the grants of money, to be disposed of in aid of building schools, to the British School Society and the National School Society; and the attempt of the Government to obtain returns as to the statistics of education for each town, chapelry, and extra-parochial place in England and Wales*. The first of these two measures contained in it the principle that the state might profitably grant money for the education of the poor: beyond this it is of little value. The second measure may be construed to mean that the State considers it within the duties of administration to know how many people are receiving education. It was easily foreseen that the answers to the government questions on education would neither be complete, nor exact as far as they were complete: it was obvious also that the information, if collected, would not be of much value. Still the design was good, the object of those who interested themselves in it was praiseworthy, and the information, considered as part of the whole information as to the state of education, useful: but being only a part, and not the most important part, it cannot directly lead to any important result. But it has indirectly led to some valuable results. A committee of the Manchester Statistical Society was formed for the purpose of ascertaining accurately the numbers of children taught, and the way in which they are taught in that populous borough. This committee was formed mainly in consequence of the great inaccuracy of the returns made to government. In the news department of this Journal we have given an abstract of their Report, which is one of the most valuable contributions that have been made of late years on the subject of the education of the poor. Similar inquiries, we are informed, are making in Birmingham. The result of such inquiries will be a conviction almost universal, that only the State can take measures efficient enough for securing good instruction to all classes, and especially to the poor. It is of the very essence of such measures to provide proper teachers for all schools under the superintendence of the State, and to allow no others to teach in them. One immediate consequence of such a measure would be, that private schools, especially those for the poor, would either be discontinued or improved.

The Glasgow Educational Society, recently established, has, among other objects, that of soliciting parliamentary inquiry and aid on behalf of the extension and improvement of the Scotch parochial schools. By the third rule of its

* See Journal of Education, No. VII. p. 79; and No. XVII. p. 66.

constitution, the society "shall consist of persons attached to the principles of a National Religious Establishment, and approving of a connexion between the parochial schools and the National Church." The labours of this society, we confidently hope, will tend immediately to the improvement of education in Scotland: the only two publications of the society which we have seen are entitled, 'Scotland a Half-Educated Nation,' and 'Hints towards the Formation of a Normal Seminary in Glasgow.' They are both well worth reading.

Out of such elements of improvement we may hope that in a few years the Government will be prepared to form a complete system of education, so arranged as to furnish to each class the education that is most useful for it, and so administered that local authorities shall harmoniously co-operate with those to whom the State shall intrust the general superintendence of the whole. All the schools, and all the teachers will thus be united in one body, of which the several members will all work to one general end, each performing their appropriate functions. Instead of being disconnected as now, they will all look to one point as the centre of their movements, and as the source from which spring their security and their success. Belonging to one body, in the general welfare of which each member is interested, the teachers and guardians of public schools will look to the periodical reports of the superintending functionaries for information as to the workings of the whole system, and the ameliorations which particular parts have received. Such a body of teachers and guardians, from their number, their superior knowledge, and their strong interest in the successful administration of that department of government with which they are more immediately connected, would require periodical publications as the organs to give expression to their opinions, and as means of learning the experience and opinions of others. Under such circumstances not one but several Journals of Education, would constantly find a sale sufficient to meet all their expenses. Different Journals might be adapted to different kinds of schools and teachers; and the objects of each being clearly defined, it would be a comparatively easy matter to render these periodical publications much more useful than, under existing circumstances, this Journal has been, or any other can be*.

* The Society for the Diffusion of Useful Knowledge is preparing for publication two volumes, entitled 'The Schoolmaster,' which will contain a selection of articles from this Journal and other works on Education. Should these volumes find a reasonable sale, it is to be hoped that the Society may occasionally think it useful to publish other similar volumes.



THE
QUARTERLY

JOURNAL OF EDUCATION.

UNIVERSITY EDUCATION.

ON a former occasion, when we made some remarks on the policy of opening the universities to all persons, without religious distinctions, the state of public affairs was such as to afford a prospect that legislative measures would soon be carried which would settle this disputed question. We believe that the subject will be again discussed in the present Session, and we hope that those who profess themselves the friends of reform, especially the members of the Administration, will not give it a lukewarm and indifferent support, but enter upon it with all the zeal and energy which the importance of the subject requires.

The question of National Academical Education, without religious distinctions (as we prefer to call it), is one which, if fairly argued on its own merits, would hardly find an opponent among reasonable men. But all the arts of sophistry have been resorted to, in order to mix it up with considerations really extraneous to the subject, but dexterously worked into the matter so as to seem an essential part of it. The considerations on which the question ought to be settled being few and simple, we shall endeavour to state briefly what they are; and we shall advert more especially to one view of the subject which, we think, has not been made sufficiently prominent.

Persons of all religious professions are now admissible to all offices in the state; and the universities are professedly the great schools of education to qualify men for all situations, not only in the church, but also in the state. But to render them really efficient, as national institutions, it is essential that they should afford the means of education to all, as freely as the State admits all to its various offices. Those who look upon the admission of dissenters to civil

power with any degree of suspicion ought to be foremost in all attempts to diminish the mischief which they anticipate, by adopting all practicable measures for rendering the dissenters qualified for the discharge of civil duties, and for neutralizing, as far as possible, any supposed bad effects of a sectarian spirit. To this end no means would be more effectual, than to give persons of all religious denominations the opportunities of the best instruction that the country affords. The dissenters and the churchmen would thus meet on common ground at that early period of life, when the strong feelings of party prejudice are not too deeply implanted to be eradicated; and the recollections of early friendship and of their common place of education would, in after life, diminish those feelings of jealousy and mutual dislike from which, we believe, the best men on both sides are not entirely free. If it be imagined that there is any danger in a dissenter having a share in the legislature, or in any department of administration, that danger is much increased if the individual be ignorant, narrow-minded, and ill-educated. And the mischief, as those opposed to the dissenters would term it, having been already incurred by the removal of tests, all that remains to be done is to diminish these supposed bad effects, as far as possible, by giving both to the dissenter and the churchman the best common education which our institutions can supply.

If a narrow sectarian education renders a man who occupies any public station an object of suspicion—if an education without religion be considered still more dangerous—it surely becomes particularly imperative on those who think so, to offer to such persons a good and liberal course of general education, with the opportunity, at least, of obtaining religious instruction.

Every body will admit that public situations ought to be filled by competent persons; and that a public and systematic education is essential to qualify men for such places. Accordingly in several German States, especially Prussia, no person can hold any place of trust under the government without having gone through a regular course of education, and passed with credit certain examinations. Public functionaries are appointed for the public benefit, and all are interested in having those appointments as well filled as possible. It is not then a matter of justice, as it is sometimes called, to open the universities to a large class who are now excluded from them, but it is a part of common prudence and policy, that all persons who may by any possibility occupy a public place should—we will not say be allowed—but required to go through a regular course of education in

universities and other places of public instruction. It follows, as a matter of course, that the public and authorized distinctions, the degrees and titles, which in some measure at least are the marks of proficiency in academical studies, and which are *some* test of intellectual attainments, ought to be awarded in the same unrestricted manner to all who are found to deserve them. The legislature, having thrown open situations in the State to persons of all religious denominations, cannot consistently refuse to remove all restrictions on education, which not only deprive, or tend to deprive, dissenters of such an education as will fit them for public life, but deprive them also of those honorary distinctions which are the public evidence of academical attainments, the passport to a certain sort of acknowledged rank in the several professions, and to a certain station in society.

But it is objected that, by giving the dissenters degrees, you give them votes in the universities, and thus entrust them with a dangerous power. Such an objection can be plausibly maintained only by those who are entirely ignorant of the practical working of the university constitutions. Those who are acquainted with the University of Oxford, and still raise this objection, deal unfairly with their opponents in urging that as an objection which they know to be of no weight at all; for their adversaries, if they are candid men, must needs acknowledge (being ignorant of the true state of the case), that the objection is not without its force. We will speak positively with regard to Oxford: but we believe remarks very similar will apply to the constitution of the University of Cambridge. In Oxford the whole governing power lies with the heads of houses, and the right of an absolute veto, which is vested in the vice-chancellor and proctors, is sufficient security against all innovations, however strong the supporters of them may be in convocation.* The constitution of the university affords no check upon the heads of houses, with whom every measure must originate; but if it did, the dissenters never can be more than a small minority, and the notion of any danger from their possessing votes is absolutely chimerical. For it is manifest, from a variety of combined causes, that under almost any conceivable condition of affairs the Establishment will possess an immense preponderance and ascendancy in the university, and will be more united than the members of various communions, some

* At Cambridge any member of the Senate can propose a measure; but any one member of the *Caput*, which consists of the vice-chancellor and five other persons, (who are virtually nominated by the vice-chancellor,) can stop any measure.

of which differ more from one another than each does from the Church.

All the arguments which have been urged with regard to the practical difficulties attending the admission of dissenters refer to the *religious* character of the collegiate institutions, of the aggregate of which at present the university is made to consist. Now even here we have always been of opinion that the difficulties are greatly over-rated, and that the main thing wanting to overcome them is a little mutual accommodation. The lectures given by college tutors on the Greek Testament and theological subjects might be rendered such as a dissenter need not object to attend, and from which he might derive much instruction, though on some points he might entertain a different opinion from the lecturer. It is evident that such lectures never can be made to suit precisely the opinions of all even of those who now attend them, and they must be so framed as to be useful to the greatest number. The same may be said of the examination in the rudiments of religious knowledge at the degree. Even under the present system, an examiner would not venture to reject a man competently qualified because he should maintain a different doctrinal view of any passage from that adopted by the examiner. All that is wanting even in this part of the system, so often referred to as presenting an insuperable obstacle to the dissenter, is a due regard for the religious opinions of others, which is perfectly consistent with the most uncompromising adherence to our own. The real difficulties of the case, we venture to say, depend much less on considerations arising out of statutes and forms, than on the absence of this spirit of liberality. The alleged impossibility of so arranging matters as to admit the dissenters arises mainly from the want of a disposition to attempt it. We are persuaded that, if this disposition were really felt, all other obstacles would soon give way. We say this, even on the supposition that the existing system were to remain exactly what it is, that the Church were to retain its supremacy, and to be the only recognized form of religion in the university. We do not now consider whether this is necessary or useful; but we will rather suppose, what we are convinced must practically be the case (unless a most extraordinary change of opinions should take place), that the Establishment will always be the dominant party in the university. Still we say, if a truly liberal spirit actuated the heads and tutors, they might, if they pleased, admit dissenters without difficulty, mischief, or compromise. We greatly fear, however, that at present there is but little indication

of such a spirit. There are, indeed, one or two solitary instances of a tendency towards it; and it is always something if there be even a beginning made towards such a change in opinion. We here allude, more particularly, to a pamphlet which lately appeared, entitled 'A Review of the State of the Question respecting the Admission of Dissenters to the Universities,' by the Rev. E. Denison, M. A., Fellow of Merton College, Oxford.

This publication, though very far from taking so comprehensive a view of the subject as we are inclined to do, is yet widely and honourably distinguished, in tone and character, from other Oxford pamphlets that have lately appeared. It bears, throughout, the marks of coming from a candid, sensible, and liberal-minded man. The author is favourable to the abolition of subscription to the Articles, and would admit dissenters into colleges, provided they were willing in all things to submit implicitly to college regulations, and the established system of religious instruction. The tone and spirit in which these requisitions are contended for, show a strong disposition to diminish compulsion as much as possible, and to conciliate in every point where accommodation is practicable.

The author, with great candour, discusses the several modes by which the difficulties attending the religious part of the examination might be avoided. But, he concludes,

'The best plan (provided always that the previous system of education give security for fitting religious instruction) would probably be to exempt dissenters from the examination in divinity altogether, on their producing certificates from their private instructors of a due proficiency therein. In this way, while the principle of the connexion of religion with education was retained for all, and the efficient practice of it secured as far as regards the members of our own church, the jealousies and difficulties which the examination in divinity of the members of one communion by those of another must almost necessarily create, would be removed, and the dissenter would proceed to his degree as freely, as far as the public examination is concerned, as if the above-mentioned peculiarity of our universities did not exist.'—p. 36.

In another place, speaking of the plan for abolition of subscription, the author says—

'In common with many other persons, I much regret that that plan has not been carried into execution; and I hope that, at no distant period, it may again be brought forward with success.

'But though I should consider a declaration which was precisely equivalent to subscription a great improvement on the present practice, (and this, I believe, is all that was of late contemplated,) I should myself wish to see our doors of admission

opened somewhat wider than they are at present, by the terms of any declaration which might be substituted for the subscription, and our academical edifice constructed upon a more comprehensive plan. I would willingly admit to our colleges all who could conscientiously avail themselves of our institutions, such as they are; and a sincere conformity in worship, and willingness to receive instruction, is therefore the only test I should desire to see imposed, and the necessity for such conformity, and the required attendance on such instruction, the only means of exclusion. I would not give up one jot or tittle of our system of education, as now carried on. I would not sacrifice our social worship, nor any of our institutions, in order to accommodate those who may differ from us. But there are many persons who, though they might not be able to declare themselves members of our church, or to subscribe to all its articles, might still be able very conscientiously to join in our worship, and to share in the education we offer, with no injury to us, and great advantage to themselves. All such I would gladly see received among us.'—p. 49.

The author's views certainly fall short of what we think ought to be done; but as a symptom of the increasing liberality of the university, we receive the announcement of such opinions from Oxford with sincere pleasure. The whole pamphlet is well worth an attentive perusal.

With regard to the attendance at chapel so much insisted on, many persons are not aware that the use of the entire liturgy in college chapels depends on the authority of an Act of Parliament. In two colleges in Oxford (possibly in others) it has been long since discovered that the act does not prohibit other forms; and though their chapels are opened twice a-day for the church service, their junior members are only required to attend at certain short prayers in the morning and evening. How far considerations of this kind might help to get rid of some of the difficulties of the case, it is not our intention to discuss; indeed, the whole of this part of the question being beside our present purpose, it is enough to have made the above suggestion.

Much has been said on the question of legislative interference with the University Statutes. Nothing could exceed the exasperation of the heads of the University of Oxford at the introduction of those measures in the last Parliament, which they considered an unjust interference with their rights. It was much more this consideration than that of the particular nature of the proposed changes which stirred up their hostility. They totally forgot, in their zeal for their statutes and the legislative powers of the board of heads of houses, whence that authority was derived; and while maintaining the inviolability of the Thirty-nine Articles, they did

not recollect that subscription to those Articles—nay, the very existence of the Articles themselves—originated in the authority of an Act of Parliament, which was a far more daring invasion of the so-called rights of their predecessors than anything contained in the measures now referred to. They denied the *right* of the legislature to admit Dissenters into a Church University, but shut their eyes to the question by what right Protestants had been admitted into Catholic Colleges. The right in either case is the same; it was in the first case, and would be in the second, an act of the sovereign power of the State, which excludes all considerations of *right* as the Oxford opponents of the Dissenters' claims understand the term. If they wish to discuss the question on intelligible ground, let them show how far interference with their statutes will be right in the sense of being useful; and in their consideration of the question of usefulness let them not forget that other people besides themselves are interested.

The numerous absurdities that were broached on this subject during the late discussions, are curious as samples of the way in which such questions were viewed in one of our national universities. There were persons who fancied that they saw, in the attempts of James II. to force certain persons on the Universities, a parallel case to the changes recently proposed. They did not perceive the difference between the illegal attempt of the individual king, of one member of the sovereign power, and a proposition for a legislative enactment to be made in the usual manner. They did not perceive the difference between a law properly so called and an attempt by one member of the sovereign power to do what requires the consent of all three; and this, too, even when the objects contemplated in the two cases were quite different.

Independently of the importance of the particular measure at issue, we have looked with considerable interest at the proceedings in parliament, with the hope of seeing established the principle of legislative interference in the government of the national universities. We are aware it has been laid down by high authority that it is most desirable that any measures affecting the Universities should be carried with the concurrence of the University authorities. In this we most cordially agree: that it is highly desirable we readily admit; but we do not believe that it is at all likely that any effective measures will ever be carried in this way. Not long since a proposition was made in Oxford by the very highest University authority to the heads of Colleges for the abolition of actual subscription to the Thirty-nine Articles at matri-

culution, and the substitution of a specific declaration of conformity to the Church ; but even this was rejected.* The fact is, the existing legislative body of the University never will admit any concession whatever affecting certain points which they consider the unalterable principles of the University constitution. Nothing ever will be done, we are firmly persuaded, without the vigorous interference of the legislature. Any one who examines the University constitution will perceive that, as in former times, it received all its statutes from royal authority ; so, by its very construction, it could never have been designed for the functions of legislation. As the initiative of every measure rests with the heads of Colleges, the Vice-Chancellor singly, and the Proctors jointly, having an absolute *veto* on all measures, and as all statutes are propounded and passed or negatived *in toto*, without the power of alteration or amendment in convocation, and nothing is permitted in that assembly but a show of debate carried on in Latin (resembling Queen Elizabeth's license of debate to her obedient Commons)—it is manifest that hardly anything worse calculated for furthering beneficial changes could have been contrived, or more skillfully adapted for keeping things just as they are. If, therefore, any great improvement is to be accomplished in the form and constitution of our Universities, it must be effected upon the recommendation of a commission for inquiring into the entire University system. Such a commission, if composed of able and unprejudiced men, well acquainted with the Universities, sincerely desirous to maintain all that is good in them and to extend their benefits still more widely, would be the first step towards placing the higher education of this country on a more enlarged and permanent basis.

Measures now passed or in progress seem likely to remove all distinctions in the medical and legal professions between persons properly qualified, without respect to religious distinctions ; that is, without reference to their having graduated at universities which impose religious restrictions. Without in the slightest degree undervaluing the just and liberal spirit in which these measures have been conceived, it is plain that they do not meet all the exigencies of the case. The measures alluded to are those of particular bodies exercising their right of legislating for the regulation of particular professions, and the conferring of privileges connected with the exercise of those professions. The present argument refers to the enactments of the state with regard not merely to

* See Oxford News, May 20th, at the end of the Journal.

professional qualifications, but to the general, systematic education of a large and important part of the community.

Those, indeed, who consider university education as merely a preparation for holy orders in the Established Church, and for the professional education of those members of the Church who choose to avail themselves of it, may think that the regulations referred to supply the deficiencies of the university system, and render all further attempts at alteration in that system superfluous.

But those who look at the universities as places of more comprehensive education, and especially those who are the strenuous advocates for the general cultivation and discipline of the mind as the proper and necessary preparation for all professions and all situations in church and state, (the favourite plea of the very heads and tutors themselves,) they, above all others, must admit that a far deeper and more extensive reform in our academical education is necessary. Without this reform, the nation will never possess a body of well-educated men, competent to discharge the various and important administrative functions in the state; nor will any of the professions, commonly called 'liberal,' reckon among their members a large majority of intelligent, well-instructed, and honourable men.

Besides Mr. Denison's pamphlet, another publication has recently appeared in Oxford, the production of one of the most highly distinguished members of that university, which, though treating more generally on the theological question between the Church of England and the Dissenters, yet refers specifically to the subject of academical subscription. It is entitled 'Observations on Religious Dissent; with particular reference to the Use of Religious Tests in the University.' By R. D. Hampden, D.D., Principal of St. Mary Hall. The author is the advocate of freedom of conscience, and in his former works has elaborately examined the nature and tendency of religious dogmas. In the present instance, though we entirely agree in the liberal view which he takes of the subject upon theological grounds, yet we doubt whether his claim for the maintenance of the university as exclusively a Church of England institution is quite consistent with those opinions which he has expressed in previous publications. He also deprecates all legislative interference, which we should object to as much as he does, if we thought that the changes, which we believe to be necessary, could be effected in any other way.

ON THE INSTITUTION OF INFANT SCHOOLS IN LOMBARDY, AND OF HOLIDAY SCHOOLS BOTH IN LOMBARDY AND IN TUSCANY.*

THIS is an interesting report, by the Abate Aporti, on the progress of popular education in Lombardy, and more especially on the introduction of infant schools at Cremona, effected through the exertions of Aporti himself, who has been for several years director of the elementary schools of the same town, and is also the founder of the Cremona school for the deaf and dumb. The report refers, in the beginning, to the low state of morality in which the great mass of the people in Lombardy, and especially the humbler classes, were sunk at the close of the late war, after so many political changes which had destroyed the influence of former social habits and opinions, and left nothing to supply their place except the religious instruction administered, and the devotional rites performed by the parish priests on holidays. But this imperfect and irregular instruction could be of little use to hardened and uncultivated minds. A gross ignorance of the fundamental principles of religion, as well as of all social duties, had spread over the country, and threatened to plunge the population into utter degradation. Some fresh and powerful impulse was required to rouse the people from their torpor. The system of universal popular education was introduced by the government; and in 1821, the upper elementary schools were opened at the expense of the public treasury, in the chief towns of every province. In the following year, 1822, the minor elementary schools were ordered to be opened in and at the expense of every commune. Of the rapid progress of this system in Lombardy we have spoken in former articles of this Journal. Aporti dwells on its beneficial effects, especially on the moral discipline, the habits of order, propriety, and self-control to which young people become thus early accustomed, and on the kind and social feelings which their common education must impart to them. Rich and poor are mixed together in the schools without distinction; they become friendly to each other; they learn to esteem each other, independently of the chances of birth and fortune; and feelings thus early conceived are likely to retain a salutary influence in after life. It seems that the clergy of Lombardy have heartily concurred

* Relazione del Sig. Abate Ferrante Aporti di Cremona sulle Scuole di Lombardia, e principalmente sulle Scuole Infantili. Atti dell' Accademia de Geor-

in fulfilling their share of the task. A lesson on religious doctrine forms part of the daily exercises. One statistical fact mentioned by Aporti will strike those who are acquainted with the customs of Catholic countries. It is customary to give boys, on their first receiving the communion, a small gift as a memento of this great event in their life. Owing to the illiterate state of former generations, rosaries were in most cases the only gift that could be of any use; the young communicant who could not read might count his beads while saying his prayers. But now, since the introduction of the elementary schools, out of 100 boys or girls there are hardly four or five to whom rosaries are given: the rest receive tracts and other religious books which they can read and understand. Again, ten or twelve years ago in Lombardy, there were no mistresses fit to keep girls' schools, except in the monasteries, but now there are 1100 well-qualified school-mistresses. It was calculated in 1830 that about 436,000 boys and girls, of or above twelve years of age, had completed their elementary education in the schools, being more than one-fifth of the whole population. By the year 1840 it may be fairly reckoned that there will be very few persons in Lombardy under thirty years of age who will not have received their education in the schools, either public or private, all according to one uniform system. Making all due allowance for imperfections, individual cases of failure, and other incidental exceptions, still what a change will have been effected in the mind and habits of the people. This may be called a true regeneration of a whole nation, a regeneration effected quietly, without bloodshed, without violence, without costly sacrifices, without any injury to any one individual.

In the plan laid down by the government of Lombardy for universal education, the formation of Sunday, or rather holiday schools, (for in Catholic countries there are many more holidays than Sundays,) was suggested to the respective communes as a most desirable part of the whole system. The town and province of Cremona have been foremost in acting upon this suggestion. The population of Cremona is 26,000, and that of the province 180,000. In 1833 there were four holiday schools in the town, and fifty-five in the province, which were attended in all by about 800 pupils. Similar institutions were spreading in the other provinces; there were 208 in 1832 in all Lombardy (exclusive of the Venetian provinces), which were attended by between four and five thousand individuals. Boys above twelve years of age who have left the elementary schools, and have become apprentices or journeymen, receive instruction for two or three

hours every holiday, and thus not only retain what they have learnt before, but improve themselves still further. They are taught drawing applied to the mechanical arts, the principles of architecture, &c. At Mantua, Professor Vergani directs one of these schools, in which he teaches gratis linear mathematical and ornamental drawing, and the elements of various branches of mechanics connected with the mechanical arts. At Pavia, the Bishop has also instituted a holiday school. At Milan there are several holiday schools, in one of which, that of S. Luca, Colonel Young has instituted a course of gymnastics. An account of these and other benevolent institutions in the city of Milan is given in a little book, entitled *Quadro Statistico degli Istituti di pubblica Beneficenza di Milano negli anni 1830-31 : Compilato da Giuseppe Sacchi*. The holiday schools are also frequented by grown-up artizans, who have not had the advantage of elementary education in their youth, and thus they answer the purpose of 'schools for adults,' a most important part, though one not sufficiently attended to, in every complete system of universal education. While our cares are turned to the instruction of the rising generation, and to laying the foundation of a better social state, we must not forget that for many years to come the grown-up part of the population will constitute the majority in point of strength ; that this population has grown up for the most part in ignorance and prejudice, and often in vice ; and that, unless we effect at least a partial change in their minds and habits, there will be less security for the future prospects of the rising generation. We wish and expect the children to be a very different race from their parents, but this must depend in a great measure on the good conduct of the parents themselves, until the children have grown up into men. For this reason, as well as for the general security of society, while we educate the children, we ought not to lose sight of the parents ; the greatest possible number of adults, men of mature years, and old men too, ought to be induced to partake of the general benefit of instruction and of moral education, that their ideas may be raised, and their habits humanized, that they may become sensible of the pleasures attending intellectual cultivation, and the advantages which they may derive from it even for their physical welfare. Adult schools, schools of industry, Sunday schools, mechanics' institutions,—all these are means of raising the moral standard of the grown-up generation, among which we must continue to live, and with which we must move on for years to come, until those children that are now being educated shall have attained the age

of men, and be numerous enough to constitute the effective strength of the population.

We now pass on to the department of general education, with which Aporti's report is more especially concerned, namely, 'the infant schools.' Several years after the establishment of the elementary schools in Lombardy, when the system was fairly at work, it struck some observing persons that its beneficial effects were not so general as might have been expected, in consequence of many of the children, who came to the schools when they were past six years of age, having their moral or intellectual faculties already vitiated. Some had acquired bad habits, others appeared stupefied or brutalized, and it was found extremely difficult to do any good with them. Upon inquiring into the causes, this early moral corruption was traced to domestic neglect or positive bad example, and to the vicious system of infant education which had been till then carried on in the *Scuole delle Maestre*, which were conducted by elderly women, ignorant and otherwise ill qualified for the task. Aporti's observations on the children of his own town, Cremona, are classed under three heads: first, moral habits; second, intellectual cultivation; third, physical faculties. With regard to moral habits, he observes that the too great indulgence of parents produces obstinacy and capriciousness in the children; that a spirit of violence and revenge is often engendered in them by the silly practice of mothers and nurses, who teach the child to strike or threaten with its hand cats, dogs, or other domestic animals, or even inanimate objects, such as a chair or a table, against which the child may happen to stumble or knock himself; that shyness or moroseness are produced by the children being left too long alone at home, or being neglected or harshly used by ill-tempered and surly parents; that a want of order, cleanliness, or decency in the parents is sure to lead to similar deficiencies in the children; that parents who neglect their prayers and every other practice of religion bring up their children in the same brutal ignorance of the very first elements of Christianity, &c. Concerning the intellectual cultivation, almost the only thing impressed on the infant's memory, whether at home or at the Maestre schools, was some silly or mischievous story or fable of ghosts, hobgoblins, witches, or fairies, which filled its little head with idle terrors and false ideas. If children can retain a vivid recollection of so many absurd and mischievous images, which they often do to an advanced age, why not exercise their memory in retaining the idea of something true and useful to them in after life? If they can learn

the language of nonsense or vice, why not teach them at once the language of reason and virtue? Why not give a direction to their opening judgment, instead of allowing it to stagnate in listlessness, or to run wild among an unreal creation of unseemly objects? With regard to the physical faculties of children, Aporti justly censures the practice of keeping children for hours together fixed to their little chairs or stools, which, besides injuring their constitution, gives them the first impression of a painful and tyrannical restraint, makes them hate the school and the mistress, and look with eagerness for the time of release, when they may indulge in a wild and often mischievous excitement. There is an erroneous idea prevalent among many persons that children under five or six years are irrational beings, that they can learn nothing reasonable at that age. But children can learn as soon as they begin to talk. At this early age, a child, as soon as it sees a new object, will always ask its name. This points out the way of instructing children, by showing them either in reality or in prints new objects, and by repeatedly asking them the names of those they are already acquainted with. They thus acquire without trouble a vocabulary of the most useful terms in their native language. It has been remarked by those who have been conversant with the lower classes of people in Italy, how little they are acquainted with technical terms, either of natural or artificial objects, beyond the limited sphere of their daily occupations and wants, which deficiency makes them fall into the slovenly habit of designating an object which they know by sight but not by name, by saying 'quella cosa,' 'that thing,' or, still worse because ungrammatical, 'quel coso,' pointing to the thing itself if in view, or resorting to a clumsy circumlocution, without ever giving themselves the trouble of inquiring the proper name. This is particularly the case in Southern Italy, in the Roman and Neapolitan States. Their common vocabulary is thus extremely limited and poor, and this too while the Italian language is most abundant in technical terms. Children are very fond of listening to tales and stories, and this furnishes another means of attracting their attention to simple and useful narrative, founded on historical facts, and especially on sacred history. When children see a painting or print, they run eagerly over it with the eye, and inquire what is that, or who is this? what is he doing, &c.? Choose therefore a good print representing an historical fact impressive of some wholesome moral truth, and while the child examines it relate to him the story connected with the subject. Again, children love to hum,

chant or sing; teach them a just intonation and the first elements of modulation of the voice, and their ears will soon get accustomed to the impressions of harmony and proper cadence. This will strengthen their organs, will impart a pleasing flexibility to their voice in speaking, and will accustom them to pronounce the words loud, full-toned, and therefore correctly, instead of the mangled thick sounds which one hears often from the mouths of the people. It will, if begun at an early age, tend to correct that hoarseness or shrillness of the voice, which in persons grown up often spoils the effect of the best-constructed sentences, and it will also in most cases cure those impediments of speech which are often produced, or at least strengthened by carelessness and indolence in speaking, and which in after years lead to a confirmed habit of stammering.

From these reflections, and upon these principles, Aporti drew up his plan for an infant school in the town of Cremona. He thought of trying it first with the children of parents in easy circumstances, and he laid his plan before the government at Milan, which approved of it immediately, by an imperial decree of August 30, 1829, in which M. Aporti was requested 'to inform the government from time to time of the working of the new institution, it being a most important desideratum to have a collection of facts in order that, at a future time, a greater extension might be given to similar establishments, should they prove useful.' This first essay having succeeded, Aporti in the following year reverted to his original purpose, namely, that of opening infant schools for the children of the poor, to be supported by charitable contributions. This plan being likewise laid before the government was approved by a decree of the 31st August, 1830. Sufficient subscriptions were obtained to enable thirty-four little boys to be admitted in the first year. In January, 1833, Aporti opened an infant school for girls, and at the end of the same year ninety-four boys and forty-six girls were educated gratis in the infant schools of Cremona. Children of poor artizans, or of widowed mothers, from two years and a half to six years of age, are admitted at eight in the morning and remain there till sunset, and are supplied with dinner at the expense of the institution. Defendente Sacchi, a writer of some note in Italy, visited the infant schools of Cremona, in October, 1833:—

'I saw the children in each school receiving the first useful impressions on their tender minds; I saw them walking three by three in the court, the oldest teaching the step to the younger ones; I heard them sing religious hymns, not in Latin, but in the Italian

language, the words of which are adapted to their comprehension ; and lastly, I was present at one o'clock when they all sat down round the tables, each with his basin of wholesome *minestra* before him. I was really affected at the sight, and was comforted at the idea that these are among the purest fruits of modern civilization ; and I repeated the words of the excellent Lambruschini, that these are truly revelations of the spirit of wisdom and of charity, which is thus preparing in the infant generation a race worthy of new and brighter destinies for the world.'

Aporti has published a manual for infant schools : *Manuale di Educazione ed Ammaestramento per le Scuole Infantili*. The book is divided into two parts. In the first he shows the many errors committed by parents in the physical, moral, and intellectual education of their children, and he suggests how to avoid similar mistakes for the future. With regard to moral education, Aporti insists especially on the importance of domestic example :—

'It is that which makes the deepest and the most lasting impressions on the minds of children ; it is, therefore, a most sacred duty both of parents and teachers so to conduct themselves as to give them none but good examples. If those who are about children of tender years were virtuous, the great majority of children would grow virtuous likewise. *Maxima debetur puero reverentia* : An infant should never witness actions, or hear words from which he may derive wrong notions of conduct and morality. Parents ought to abstain in the presence of children from speaking ill of other people, as this is apt to engender contempt and antisocial feelings. Harshness towards the poor or the unfortunate, derision of the deformed, gluttony, drunkenness, pilfering, falsehood, indecency in words or actions, all these are sure to contaminate the minds of children if they see their parents indulge in such habits. Squabbles between father and mother, recriminations, hard words, tend to destroy filial respect. It is from this last fruitful source that the disorders of the lower classes are chiefly derived.'

The second part of Aporti's Manual treats of the method pursued in his infant schools. Children are made acquainted with the names of familiar objects, classed systematically,—for example, the parts of the human body, articles of dress, furniture, and of food, names of various kinds of buildings, and their respective parts, domestic and agricultural implements, the names of the most common natural products, divided into animal, vegetable, and mineral. This is done either by showing to the children the actual object or a good model or print of it, making them notice its shape, colour, and other accidents, and drawing their attention to the similarity or shades of difference between various species of the same class or genus. The prints used are chosen from

the best of their kind, so as to awaken in the child a taste for beauty. The children are taught to spell, and to pronounce each syllable distinctly. They are also made to learn by heart a certain number of words every day, increasing the number gradually; and they are afterwards taught writing and ciphering. With regard to moral and religious education, prayers are said morning, noon, and evening, in the Italian language; they are taken from the Scripture or the Liturgy, the Lord's Prayer always forming a part of them. Psalms selected from Mattei's Italian translation are sung and at the same time learnt by heart. An abridgment of the historical part of the Scriptures has been arranged in form of a dialogue between the teacher and the pupils. The discipline of the school, the subordination required from all the pupils, and the kindness shown to them at the same time, all contribute to the object of moral education. When little altercations occur between the children, the subject of them is attentively and patiently investigated by the teacher, and the true bearing and reason of the case explained to the disputants as clearly as possible, so as to make their judgment satisfied, while the opportunity is taken of impressing them with a sense of the necessity of mutual indulgence and of reciprocal justice. Three times a day the children walk out and play in the court or garden, and in the school itself they frequently walk up and down by squads, and are taught to keep the step and hold themselves upright. The essential principle of the whole system is to make the children feel an interest in all they do, so that their exercises shall be an amusement rather than a task.

Lambruschini having communicated to the Academy of the Georgofili, in July, 1833, the report of Aporti's infant school, a subscription was immediately made for the purpose of opening at Florence a school similar to those of Cremona. Piero Guicciardini, a Florentine nobleman, who like Ridolfi, Tempi, Capponi, and others, reflects honour upon his order, undertook the management of the projected institution, which was opened in April, 1834, to some of the poorer children of Florence. Other infant schools have been formed at Pisa, Prato, and Leghorn. The last contained, in 1834, about fifty children. We sincerely wish that the example may spread to other parts of Italy.

At Siena, the Cavaliere Spannocchi and some of his friends have opened at their own expense a school for young artisans, for one hour every day, where they are taught reading, writing, and arithmetic. Twice a year prizes are distributed to the most deserving. It is remarkable that the hour ap-

pointed is from twelve to one, which is the time allowed to journeymen for their dinner, and yet many choose to attend the school in preference. The Marquis Tempi has founded at Florence a school in which artizans receive instruction in geometry, mechanics, and dynamics, from Dupin's courses.

The Abate Lambruschini, whom we have repeatedly mentioned as a most zealous promoter of popular education in Tuscany, established, in 1830, a holiday-school at Figline in the Val d'Arno, in which linear drawing, perspective, and the elements of geometry and mechanics are taught, besides reading and writing. After witnessing for two years the good effects of this institution, Lambruschini, seeing that its continuance was endangered for want of support, addressed, in 1832, the following considerations to the wealthier classes of the country:—

'It is now the business of those proprietors who derive from this province either the whole or part of their income, to decide whether it is their interest or not that the labourers whom they must employ on their estates should be men well acquainted with their profession, and in some degree cultivated in their minds and sober and regular in their habits, instead of having them idle and spending the holidays, as many do at present, in the wine-shops with cards in their hands and the glass before them, or listening in the market-place to the trash of quacks and impostors. It is for all honest men in every province of Tuscany, to pronounce the sentence of life or death upon an institution, which if crowned with success will lead to the establishment of similar institutions in all parts of the country; but which, if unsuccessful for want of support, will tend to convince the indolent, the faint-hearted, and the prejudiced, that all our prospects of bettering the condition of society are mere vanity and delusion.'

We are glad to hear that the school of Figline has been maintained, and that similar schools have been opened in other places in Tuscany. Nor is Lambruschini blinded by enthusiasm to the many and great difficulties that attend the subject of popular education. He has candidly stated them in an eloquent memoir, which he read to the Academy of the Georgofili, in December, 1831, with some extracts from which we shall conclude this article:—

'Those who are averse to popular education may be divided into two different classes; some are fanatical and prejudiced men, who hate instruction for its own sake, and who would restore the happy times in which kings themselves could not write, and were obliged to affix their signature by means of a stamp. But these are few, they cannot hurt us, and they deserve no answer. There is, however, another and a much more numerous class of men, neither malignant nor frantic, who have no bad feeling towards the people,

but who fear because they miscalculate the consequences of general instruction, and fear it not only for their own security, but for the happiness of the people themselves. They think that the lower classes will become arrogant, restless, dissatisfied with their condition, will acquire tastes and aspirations inconsistent with their means, and will at last throw society into confusion and cause much misery to others, without in the end benefiting themselves. This class of adversaries must not be treated as fools or as enemies; they ought to be reasoned with, as friends with whom we differ in argument; remove their fears, and they will join us in the blessed work. We must examine their objections, and perhaps in so doing we may find something to alter, something to improve in our own views and system. One great deficiency in all that has been done for popular instruction has struck me repeatedly. We have formed primary schools, we have simplified the methods of teaching, we have induced as many children as we could to receive elementary instruction. All this is right. But suppose the whole rising generation fully able to read and to understand what they read, what books shall we put into their hands? We must confess, there is hardly a book as yet in Italy written really for the people. Bad books we have plenty of; silly books are likewise in abundance; we have also, it is true, numerous works of science, poetry, refined learning, or of elegant literature, but these are not the works fit for or useful to the children of the poor. Let us turn our attention to produce good elementary works; let our learned men not disdain to write for the humblest classes of readers; let us invite, let us encourage them to do this, otherwise all our primary schools will be either useless or dangerous. We lavish hundreds and thousands of sequins on a singer, dancer, or a fiddler, and we grudge a small remuneration to the author of a good elementary book. Let people find in the practice of reading, in which we take so much pains to instruct them, a guidance for their conduct, food for their mind, a means to improve their condition, a comfort in their privations, otherwise it were better for them if they had never learnt to read. In fine, let us bring forth good books suited to the wants and capacity of the people, or let us shut up at once our elementary schools. Again, is it enough for the people that they should read and write? Is not the immense majority of the children of men obliged by a natural necessity to earn their subsistence by the sweat of their brow? They may read good books in their moments of leisure and they may relish them, but they must work, their trade or occupation must be the essential object of their particular study. The instruction we give them ought therefore to be mainly directed to this object. Our schools ought to be also schools of industry. Sciences have now fortunately become practical; there is not a profession or handicraft that cannot derive infinite assistance either from chemistry or mathematics, mechanics or physics. To instruct them how to avail themselves of this assistance would be rendering a real benefit to the people, a benefit of which they would soon feel the practical results. Lastly, we ought, while we cultivate the mind, not to

neglect the heart of our youthful pupils. But this is unfortunately the part least attended to in all systems of education. It is on the qualities of the heart that individual satisfaction and domestic happiness mainly depend. The method of mutual instruction, wisely directed as it is in our Florence school, might greatly assist this moral training. A school might be made the model of a well-ordained society, administered by impartial laws, rewarding merit, encouraging the slow, repressing the intemperate, equitable and benevolent towards all. But perhaps some other principle is wanting for this purpose besides mere philanthropy; perhaps religion is required to complete the work of the total regeneration of the people. Religion, it is true, has been often disfigured by the passions of man, and has been the cause of much misery; but the shadows of error vanish away, and religion remains still the true friend of mankind, the comforter of the poor, the link between the various classes of society, the hope and comfort of all. It is perhaps reserved for religion well understood to effect the perfection of a system of popular instruction, which may prove at the same time a system of moral education. There is perhaps still a greater task reserved for it, namely, to find means that the people shall never be without a supply of work sufficient to procure them sustenance and decent comfort. This joined to moral education, and to intellectual and mechanical instruction, would be the real completion of the regeneration of mankind.'

Lambruschini's sentiments appear strikingly in unison with those expressed by Cousin in his Report on Prussian Education, which we noticed in No. XV. of this Journal; and they seem to be on the whole true and practical. His concluding remark on finding means for preventing the people ever being without work, and for securing them a comfortable support, are foreign to the subject which he is treating, and tend to diminish the practical value of his proposed plans by mixing with them considerations that belong to a branch of public economy.

GIRARD COLLEGE FOR ORPHANS*.

THE late Mr. Girard, a banker of Philadelphia, recently bequeathed the residue of his real and personal estate to the mayor, aldermen, and citizens of Philadelphia, in trust, to build and support a college for poor male white orphan children. This residue appears to be very large, as the testator directs the trustees, in the first instance, to apply and expend the sum of two millions of dollars, part of the said residue,

* A Constitution and Plan of Education for Girard College for Orphans, with an Introductory Report laid before the Board of Trustees, by Francis Lieber, Philadelphia. Carey, Lea, and Blanchard, 1834.

in erecting buildings suitable for the reception of, and in providing an education for, at least 300 scholars, and then leaves the remainder of the said residue for the further improvement and maintenance of the said college; expressing a wish that as many children between the ages of six and ten years shall be received, as the buildings will hold and the funds support. The testator has given very special directions for building the college in a manner to secure its being substantial, healthy, convenient, fire-proof, and simple in architectural design, intimating however a desire, that the elevation should be in good taste and symmetrical.

Mr. Girard then proceeds to direct the early organization of the college, and due public notice of its opening. Instructors and other officers of the establishment he desires may be selected for merit, and not through favour and intrigue; and it is his wish that, in the instance of orphans, priority of application should entitle the applicant to preference in admission; that the food be plain but wholesome, and the clothing plain but decent; that due regard shall be paid to the health, and, for this end, he suggests cleanliness and suitable exercise and recreation. With regard to instruction, the testator thus expresses himself:—

‘They shall be instructed in the various branches of a sound education, comprehending reading, writing, grammar, arithmetic, geography, navigation, surveying, practical mathematics, astronomy, natural, chemical, and experimental philosophy, the French and Spanish languages (I do not forbid, but I do not recommend the Greek and Latin languages), and such other learning and science as the capacities of the several scholars may merit or warrant. I would have them taught facts and things, rather than words or signs; and especially I desire, that by every proper means a pure attachment to our republican institutions, and to the sacred rights of conscience, as guaranteed by our happy constitution, shall be formed and fostered in the minds of the scholars.’

The testator then proceeds to direct the expulsion of such scholars whose habitual misconduct mild means have proved inadequate to reform, and the apprenticeship of those who merit it to suitable occupations, as those of “agriculture, navigation, arts, mechanical trades and manufactures,” according to the capacities and acquirements of the scholars respectively; and it is his wish that, as far as prudence shall justify it, the inclinations of the several scholars as to the occupation, art, or trade to be learned shall be consulted. And lastly, after forbidding the appropriation of the capital to meet the current expenses of the year, and directing the investing of any surplus income, thereafter to be and remain

part of the capital, he inserts the following singular provision :—

‘I enjoin and require that no ecclesiastic, missionary, or minister of any sect whatsoever shall ever hold or exercise any station or duty whatever in the said college; nor shall any such person ever be admitted for any purpose, or as a visitor, within the premises appropriated to the purposes of the said college. In making this restriction, I do not mean to cast any reflection upon any sect or person whatsoever; but as there is such a multitude of sects, and such a diversity of opinion amongst them, I desire to keep the tender minds of orphans who are to derive advantage from this bequest free from the excitement which clashing doctrines and sectarian controversy are so apt to produce; my desire is, that all the instructors and teachers in the college shall take pains to instil into the minds of the scholars the purest principles of morality, so that, on their entrance into active life, they may, from inclination and habit, evince benevolence towards their fellow-creatures, and a love of truth, sobriety, and industry, adopting, at the same time, such religious tenets as their matured reason may enable them to prefer.’

In all new countries so great a proportion of the resources of each individual is required for his actual wants, that the community to which he belongs is able to levy but small contributions upon him for purposes of public utility; and as there are no accumulated stores bequeathed in former times to resort to, education, arts, and sciences, all matters, in fact, which do not immediately relate to the sustenance of the individual and actual security of the state, run great risk of being neglected. A bequest, therefore, such as that of Mr. Girard, cannot but be of the highest importance to the state of Pennsylvania. The trustees indeed appear to have considered such to be the case, and accordingly, before attempting to act in execution of the will, they have directed Dr. Lieber to draw up a plan for the college, and to report it to them.

Dr. Lieber's plan of education for the Girard College of Orphans, with an introductory Report printed by order of the Board of Trustees, is now before us; and as plans similar in many respects have gained attention in England, it may, perhaps, be instructive at this moment, when the subject of national education is under the consideration of the House of Commons, to see whether we can derive any useful hints from the plan of education proposed for this new college.

That part of the will of Mr. Girard which relates to the exclusion of the ministers of religion from his college, appears to have made a considerable sensation at Philadelphia. Before, therefore, entering upon other points, Dr. Lieber first discusses this, and arrives at the conclusion that although

Mr. Girard excluded the ministers of religion, it was not his wish that religion should be excluded also. If Dr. Lieber's conclusion is allowed, instruction in religion will be secured to the college, and it is unnecessary to enter into the argument by which he arrives at this conclusion. We should, however, be sorry to see the doctor's rules of construction of wills adopted in other instances, as in the present case his construction is clearly and undoubtedly not the meaning of the testator, who certainly intended that there should be no religious instruction.

Dr. Lieber conceives Mr. Girard intended that an education better than is at present given at the primary schools in America, a sound, and as circumstances may permit, a superior education, should be given.

'But there are, perhaps,' he says, 'some individuals in our country, I know there are not many, who fear that a superior, a thorough education, would produce in the scholars a distaste against their future practical pursuits. I believe the contrary, and experience bears me out. The scholars will learn how much any honest occupation can be ennobled; how its whole sphere can be expanded by knowledge, and, at the same time, how difficult it is to know too much for any kind of art or trade. The excellent Polytechnic School in Vienna, which may be termed an university for artizans, since all the sciences necessary for them, and all the chief mechanical arts, are studied and practised there, has never yet repented its imparting knowledge to mechanics; but, on the contrary, it has been found to exercise the most salutary influence upon all the arts and trades, to procure to the Austrian mechanic sources of wealth which were unknown to him before, and to increase the national wealth by the production of articles superior to those in neighbouring states.'

'I cannot help believing that this fear arises, almost always, from a very deficient acquaintance with the nature and effects of knowledge and science in other countries than ours, often from a base anxiety to prevent its all-penetrating effects. A distinguished writer of our country has justly observed, that the college would only be so much more republican in its character if it were to offer a scientific education to meritorious and poor youths. Machiavelli says, "After him who teaches men true religion, he is the greatest benefactor who collects them into towns and villages, and establishes governments among them;" and I would add, if I may add anything to the words of that great and noble man, that after him who thus civilizes man, he is the greatest benefactor of a nation who raises the standard of education. If you raise the standard of education for a certain class and certain branches, by the system which you will establish in the college, it will have the most salutary effect on the whole community at large.'

'But what is a sound intellectual education? I conceive it to be that which *trains* the mind well, and *stores* the mind well. The mind is well trained when the education, adapting itself to the

capacities and age of the scholar, leads him to think for himself, to judge and reason cautiously and correctly, to be ever awake to everything that surrounds him; when it imparts to him a true love of knowledge and inquiry, and a sincere love of truth, which makes him willingly obey its voice, and give up prejudices for better information.

‘The mind is well stored, if knowledge, the most desirable according to the means at our disposal, the allotted time, the wants of society in general, and the future destination of the scholar, is imparted to it. What shall be taught? To find out those subjects which may be peculiar to Girard College, the surest way will be to ascertain what are the demands of our age, what are the demands of our country, what are the demands of the testator? Happily they all agree.

‘That numerous class of men which is occupied in producing, obtaining, fashioning, changing, transporting, and exchanging material, and subduing matter by the application of knowledge derived from experience and science, and which, as I have already stated, has been of late appropriately called the industrial class, has, ever since the rise of free cities in the northern part of Italy, and the consequent and still more important growth of the free imperial cities and Hanse towns of Germany, steadily gone on increasing in importance both social and political, until we find it in modern times by far the most important part in all free countries. Science was originally rekindled among the modern European nations by the revival of classical learning, and all institutions for instruction were planned accordingly; but the increased importance of the industrial class, and the new sciences sprung up since that period, created a new want of learning and of adequate institutions to diffuse it, for which last numerous establishments have been founded. They are the polytechnic schools in Paris, Vienna, Berlin, Hanover, Munich, Carlsruhe, St. Petersburg, and many others. If any country wants a polytechnic school, it is ours; the establishment of such an institution would be to support and raise in us one of our most national branches of activity, and it would therefore meet, at the same time, with the greatest success; in addition to this, if I understand the testament right, the distinct demand of Mr. Girard is to form a polytechnic school. But the great diffusion of knowledge, and the consequent demand for it—for they go always hand in hand—has created another kind of institutions in our time which we do not yet possess, and which yet are allowed on all sides to be highly desirable for us—for us, perhaps, more so than for those countries in which they already exist—I mean Seminaries for the Education of Teachers. Our population extends daily farther over our vast territory; knowledge is so indispensable an element of our whole social and political condition, and the demand for teachers increases so rapidly, that we should—such is my humble opinion—ill fulfil our duty, were we not to make at once Girard College a *polytechnic school and a seminary of teachers.*’

‘Many institutions of learning,’ observes Dr. Lieber, ‘being based on the precise state of science at the time of their foundation,

and their power of expansion being too much limited, have, after the lapse of centuries, become inadequate to the wants of the time. This is one of the great differences between German and English universities, the former having a great advantage in the comparison*, and we must carefully guard ourselves against committing a similar error. As the testator has left us at full liberty to arrange and plan, so we ought to leave posterity at liberty to add to and modify that which we establish.'

This is a sound doctrine: the want of power, or the supposed want of power, to modify institutions to suit the wants of the times, has made us respect the wills of testators long dead to the neglect of the interests of the generation now living. Lord Bacon, in his 'Essay on Innovation,' says,—

'He that will not apply new remedies must expect new evils; for time is the greatest innovator. And if time of course alter things to the worse, and wisdom and counsel shall not alter them to the better, what shall be the end? It is true that what is settled by custom, though it be not good, yet at least it is fit; and those things which have long gone together are, as it were, confederate within themselves, whereas new things piece not so well: but though they help by their utility, yet they trouble by their inconformity; besides, they are like strangers, more admired and less favoured. All this is true, if time stood still; which, contrariwise, moveth so round, that a froward retention of custom is as turbulent a thing as innovation; and they that reverence too much old things, are but a scorn to the new†.'

* We do not intend to dispute Dr. Lieber's assertion as to the superiority of German over English universities. His assertion may or may not be correct; but his inference is founded on an incorrect view of one of the things compared, and his remark shows that he does not know the history of the English universities within the present century.

† It is highly important that this subject should receive serious consideration in England. We have from time to time in this Journal had occasion to observe upon the antiquated regulations which have prevented the noble foundations of this country from effecting all the good which, under other regulations, they would certainly produce. Individuals who lived three or four hundred years ago could not, by any possibility, contemplate the changes which have taken place in society from the time at which they lived up to this date. It is, therefore, absurd that rules which were made from a consideration of existing circumstances, and which in existing circumstances were often very good, should be allowed to remain in force when those circumstances have changed. An adherence to original rules, when such rules are no longer applicable owing to change of circumstances, is in effect to defeat the will of a testator. In the instance of private property, an individual by a rule of law, called the rule against perpetuities, is not allowed to fetter an inheritance beyond a life or lives in being and twenty-one years afterwards; the average of which time has been calculated to amount to 70 years. For a longer time than this it cannot be conceived that the circumstances of a family can be foreseen; and for this reason the law gives the power to the individual in possession at the expiration of that period to remodel the limitations of the property to suit the altered position of the family in society. Following this example, might not some very salutary regulations be laid down with regard to property given for public purposes? Nothing can be more absurd than to adhere to the letter

Dr. Lieber proceeds—

'As to the sciences and subjects in general which are to be taught in the colleges, we ought to guard against two kinds of extremes into which those who are charged with the education of youth not unfrequently fall.

'In Germany, the scientific spirit so diffused over that whole country, and a certain want of practical sense sometimes induces persons to consider usefulness if brought into any connexion with science with a kind of disdain. It is as if they fear to degrade science if they bring it down to the concerns of men; as if it were derogatory to a learned man to occupy himself with that which concerns by far the greatest majority of mankind—whilst in this country, some persons attach value to nothing which they do not consider useful; and by useful they understand that only which can be turned immediately to account, or which stands in direct connexion with physical well-being. By knowledge serviceable in active life, we must not understand merely that which can directly be turned to account in a certain occupation, but also all that which will contribute to throw light upon it, and to show its manifold connexions with other subjects, and the sources whence it may derive further light and information. Moreover, we must never forget that as science in general must always be considerably in advance of application, so the knowledge of the individual must be in advance of his powers of applying it.

'The chief means of a sound discipline in an institution where many youths are assembled for education, I conceive to be—

1. Cleanliness and punctuality.
2. Few laws and strict observance.
3. Scrupulous impartiality.
4. Kindness of teachers.
5. Constant superintendence.

A person of cleanly habits will be orderly, and therefore sober. Intemperance is but too often the consequence of slovenliness; and even where it is not, we can hardly imagine it to exist with an individual of strict habits of cleanliness. Great cleanliness has further the most salutary influence upon self-respect,—a virtue or quality, however it may be called, often much neglected in modern education, and by no means inconsistent with that spirit of humility which our religion requires. I have yet to mention that a person of truly cleanly habits must needs be industrious, (I speak again of the industrial classes,) and thus, of course, will protect himself

of a testator's will and to neglect its spirit. It may be assumed that all such bequests were made for promoting the public welfare: shall they, then, in any instance be allowed to inflict an injury, or shall they be restricted from effecting as much good as possible? We think not. For this purpose a law might direct that the letter of the testator's will, if not injurious to the public, should be observed for the first 70 years, and after that period, although the objects and locality intended to be benefited should always be kept in sight, the trusts of the will should be subject to reconsideration, and, if it be deemed expedient, to revision.

against a number of vices. The necessary association of ideas between, and the mutual effect of, physical and moral cleanliness have always been acknowledged even in remotest ages; we find the evidence in all early religious rites. But cleanliness is also of great importance in political economy and politics in general. Nothing raises so much the standard of comfort of a nation as general cleanliness, and it is thus that we always find that the cleanliest nations are, all other things concurring, the most industrious, the most powerful. On the other hand, as cleanliness promotes the feeling of self-esteem, and, at the same time, domestic happiness and comfort, it promotes at once two of the most essential elements of civil liberty. The two freest nations of modern Europe, and the two most powerful (the one proportionately so)—the ancient Dutch and the English—were and are also the cleanest, whilst the two nations on the frontiers of Europe—the Portuguese and the Russians—are equally distant from cleanliness and civil independence: oppression and filth go always together.’

Mr. Lieber speaks of punctuality as being not only one of the most efficient means of discipline, but one of the best gifts which an institution for education has in its power to bestow upon the pupils.

‘I have proposed to divide the whole college into three moral classes:—The bad, the best, and those who belong to neither. If respective privileges are attached to the two better classes which prove the confidence the teachers place in their members, the division cannot fail to produce a salutary effect.’

To the soundness of this proposition of Dr. Lieber not only does our reason but our experience bear witness; for we are well acquainted with a school—namely, that of the ‘Children’s Friend Society’ at Hackney Wick—in which a division of the boys according to moral conduct has been attended with the greatest success. We have several times before called the attention of the public to the management of this school, as in a moral point of view it presents some very singular features. The pupils, for the most part, are poor destitute children of both sexes; many of them vagrants and thieves: many of them would, in all probability, have terminated a disgraceful career in this country, in the transport-ship or on the gallows. But these poor children, by the aid of a vigilant superintendence, are governed without the aid of personal violence. No corporal punishment is permitted. Dr. Lieber, although he appears to condemn a system of flogging generally, admits it to a certain extent in the plan which he has laid down. We look upon this as a great fault in his plan, and are sorry that he cannot personally visit the school to which we have just alluded, in order to be convinced of the possibility of doing without it. After asserting, in a

forcible manner, the importance of making the Bible a book to be attentively studied, Dr. Lieber makes the following observation upon the subject :—

‘ However I recommend the Bible, I cannot but urge, at the same time, the giving extracts of an ethical and historical character only to the young. Whatever may be thought on this point by many persons of the best dispositions, I cannot give any other opinion than that which experience and mature reflection have taught me to be the best. I hold it to be dangerous to give the whole Bible into the hands of children. There are innumerable parts of it which are not only unintelligible to children, but which, if properly understood, may lead to alarming consequences. There are many passages which would acquaint them with things unfit for the youthful mind. Nor do I believe that the character of the Bible does at all require that they should possess the whole. The differences of ages, and respective capacities, and wants of the mind are as well an order of things decreed by the infinite wisdom of the Creator as the great variety of contents of the Bible ; and to act wantonly or negligently against the one, disagrees as much with the obedience we owe to our Maker as the neglect of the other can possibly do. The Germans have long been in the custom of providing their growing generation with such extracts, and I would ask those who insist that the whole Bible ought to be given into the hands of children, whether having done so, they read with them all the parts of it? Do they go through all parts of the Old Testament with their young pupils, to whose tender minds many passages cannot be but startling? But if they do not read all parts of the Bible with children, why leave the whole in their hands, and excite their curiosity to read those passages which we do not wish to make them acquainted with, and which, having all the attractions of forbidden fruit, they will often secretly search for? Do we not make selections in natural history, in history, in every branch of knowledge? or do we teach them, without any regard to age, all the sexual relations so important in zoology,—all the crimes, intrigues, and vices in history, so necessary to be known for its correct understanding,—all the vicious customs and habits of various nations, so indispensable for a thorough knowledge of man?’

In the States of the Union nearly every male of full age has a voice in electing the members of the legislative body, and it is therefore highly important that correct opinions with regard to the social relations should be very generally diffused. Dr. Lieber therefore proposes to qualify the pupils of the college to become good citizens by instruction—1. Respecting the political character of man in general ; 2. with regard to the history of England and America ; 3. with regard to political duties and their practical exercise. This part of his system he considers so important, that he has proposed to draw up a catechism of those political duties, which every man in Ame-

rica is called upon to exercise. 4. As to the mechanism of nations, under which head political economy would largely enter, or which is political economy itself in its widest sense. The community and country in which we live, its industry, commerce, and productive power,—in short, the whole activity of that society to which we belong, are subjects at least as important in education as the knowledge of nature.

Dr. Lieber next recommends the erection of workshops, for the acquirement of mechanical skill: his reasons are as follows:—

‘ 1. If properly selected and judiciously used, mechanical arts are conducive to health, afford a convenient recreation, and being a great amusement to the scholars, become also, by the prohibition to practise them, an equally convenient punishment.

‘ 2. They give a general skill, an art to help ourselves, which to the latest period of life is of much use.

‘ 3. They give a general practical knowledge of the principles of mechanical arts, which, on many occasions of our lives, whether we are engaged in the practical arts or not, is called for, and always will form a ready nucleus for much valuable information, to which, without that knowledge, we remain strangers.

‘ 4. It is another means by which we place ourselves in contact with the world around us—an object which I have already described as being highly desirable in education.’

In addition to these reasons we may add, that practical acquaintance with the mechanical arts is to all but the wealthiest classes of society an addition to individual resources. There are many things which a little mechanical ingenuity can produce, which add much to domestic comfort and convenience, and which, if an individual cannot himself construct, he is in many situations and places often unable to purchase.

Few are capable of so disposing of all their time as to be unable to employ some part of it to advantage in making or mending some articles of utility. The expense of sending for a carpenter is often so great, that many pieces of furniture in a poor man's house must always bear an untidy and shattered appearance if the master is unable to drive a few nails or mend the leg of a chair or table.

Gymnastics and swimming make a part of the plan before us, it being considered no less necessary to develop the physical portion of the human being than the intellectual. Considerable stress is very properly laid on singing. Besides the humanizing effect of waking the sympathies by the aid of sweet sounds, singing, as a mean of developing the chest and giving a healthy action to the lungs, is of no small importance.

Dr. Lieber expresses himself upon the subject with great propriety :—

‘ Few things develop more the whole chest, and invigorate the lungs, if no decided predisposition to feebleness exists, than frequent, and let me add, scientific singing; because it is there only that the tone is brought forth in all its strength and fullness, whilst natural singing has always a tendency to nasal tones, which of course are of little use as to invigorating the lungs.’

A subject is next noticed which we do not recollect having ever before heard mentioned in connexion with education, namely, the art of expressing ourselves in common conversation;—a facility and happiness in doing which must be allowed to be of the utmost importance. Dr. Lieber observes :—

‘ We speak an hundred times before we write once, and though exercises which perfect us in writing correctly and tastefully cultivate also in a degree our speaking, yet there remains a vast difference between the free and cultivated use of the “breathing word” and that of the pen; it has therefore always appeared to me that the art of speaking well, not only on solemn occasions by way of oratory, but on all the many occasions created by the intercourse of men, ought to form a prominent object in every sound education. A person may write correctly and concisely, may express his ideas in a perspicuous and pleasing order upon paper, and yet be unfit to relate properly even so much as a short anecdote. That this art of speaking well is important everywhere will be denied by no one, as soon as attention is directed to the subject; but in a country like ours, where so much business is transacted, so many affairs are treated in an oral way, it becomes peculiarly important. It would be the soundest, and in my opinion the only sound preparation for the art of debating and rhetoric. In Asia, the art of relating is actually taught, and we ought not to hesitate to adopt whatever is good even from that quarter. So much is the art neglected with Europeans and their descendants, that I find in the regulations of a large orphan asylum in Berlin the prescription that the boys shall be taught to do errands well. Strange as this may seem, who has not had manifold opportunities of observing that even this low degree of the art of expressing ourselves is rarely understood? Were the art of expressing ourselves generally considered as indispensable, it would not have been necessary to single out this humble part of it. Let us observe further how few persons are able to relate clearly and agreeably a simple incident or every-day occurrence, to converse well, to give testimony in court, &c.’

To drawing Dr. Lieber attaches considerable importance.

‘ By drawing we endeavour to give a representation of the form of things, and the form is the chief characteristic in nature, incomparably more so than colour. He therefore that draws well

accustoms himself to see in all objects of the sensible world the form, the more characteristic part; hence his senses convey to his mind livelier images, and impress it with more distinct conceptions from which it works clearer ideas. Look at the difference in the description of a landscape, a building, an individual, given by a skilful draftsman, and one who has remained a stranger to this art. I believe I have sufficiently shown the importance of form in nature; that the characteristics of things depend chiefly upon it, and it is evident, therefore, that a mind taught to perceive them clearly and easily will receive livelier impressions. How much, in modern education, the cultivation of our sense of form has been neglected, is a subject on which I do not wish to enter here; every day gives us proofs of this great neglect, and I was therefore much gratified when I heard one among you, gentlemen, expressing himself, some time ago, to this effect, "Drawing ought not to be left at the option of the scholar; a child must learn to draw as it must learn to write."

On the advantage to be derived for the study of quantity and its relations, Dr. Lieber remarks—

'Mathematics have yet another great moral effect in education. They are the first science by which we can make it apparent to the youthful mind that there is order, and an order tangible by scientific inquiry in all the seeming disorder which surrounds us. Geometry affords us, in this respect, an incalculable advantage in education. A scholar finds that a space, however irregular its outlines, may be correctly represented on paper on a small scale; and this humble fact becomes the beginning of an elevated view of the human mind.

'I cannot dismiss this subject without once more urging the great necessity of paying, from the beginning, the greatest attention to what Mr. Girard calls teaching facts and things (and of course ideas) rather than words. But too often it is neglected in the instruction in arithmetic and mathematics, and the pupils accustom themselves to consider the whole science as something not much better than a play, with certain signs according to certain conventional rules; a discrepancy which is pregnant with the worst consequences, the more apparent the more the scholar advances in mathematics, or the more he is called upon to apply them.

'A useful way of giving much valuable information, even to very young scholars, on the relations and properties of the great variety of regular bodies, both in themselves and to each other, and to impress this information, with the greatest clearness, upon the youthful mind, is the making of those bodies of pasteboard and wood, as they are found in German collections of models of crystals for the study of oryctognosy. It affords great pleasure to children or youths to make these bodies, and aids most materially in forming clear and distinct notions of the manifold relations of space.'

Dr. Lieber, after recommending the study of history, natural science, language, literature, statistics, geodesy, and

technology, each in a particular manner, and for the objects and purposes to which they are severally subservient, proceeds to consider the objects for admission to the benefits of the institution, and the officers who are to govern and superintend it. We must not, however, neglect to observe, that among other means of education he has not omitted gardening and the management of an orchard, a practical and scientific acquaintance with which he deems of much importance.

Taking into consideration the description of children to be received into this college and their future destination, as designated by the will of the testator,—viz. agriculture, navigation, arts, mechanical trades, and manufactures,—we think that the character of the education is too high: men who are to labour with their hands should, in addition to a proper stock of practical knowledge, have rather the habit of bodily exertion than of mental speculation, which the kind of education here proposed will be most likely to induce. The gentleman who has been employed to draw up the plan has, however, considered rather what advantages to his country can be derived from the immense wealth of the testator, than how the testator's intentions, as expressed in his will, can be best fulfilled. He, therefore, considers whether greater advantage would not accrue to his country from educating the children with higher aims, and for different professions, than those designated by Mr. Girard; and accordingly he proposes, instead of bringing them up as 'artizans, mechanics, and farmers,' to turn this asylum for orphans into a polytechnic and normal school—two establishments much wanted in America. In doing so he will doubtless effect much good, and the great wealth at the disposal of the trustees cannot be better applied: but such does not appear to have been the intention of the testator, nor can this well bear such an interpretation. The generally sound views developed by Dr. Lieber give us reason to expect the eventual success of the college, from which we trust that the United States will derive every advantage that her best friends can wish.

The benefits of Mr. Girard's bequest are limited to 'poor male white orphan children.' These terms not only exclude females, and children not orphans, but also all children of colour. This exclusion may appear to those who are unacquainted with the United States to be an illiberal restriction. But whatever may have been Mr. Girard's opinion as to the social condition of free people of colour in the United States, he knew very well that any attempt to unite the children of whites and of coloured people in one school is at present impossible. Had his will directed that children of colour should

be admitted, the bequest would either never have taken effect at all, or some interpreter of his will, as ingenious as Dr. Lieber, would have proved that children of colour were nothing more than white children somewhat carelessly designated. M. Girard might, however, have founded two schools, one for whites and one for coloured children; but even in this case, we doubt if the school for coloured children would have succeeded. The coloured people themselves are not competent to direct an institution of this kind; and the whites, we believe, with the exception perhaps of some of the religious sects, would not undertake the direction of a college founded for coloured children. It does not, therefore, necessarily follow that M. Girard's views in limiting his bequest, as above described, must be considered as narrow and illiberal. It is quite as likely that he saw the impossibility of founding a college on more comprehensive terms. The political evil of the broad line of separation between the white and coloured people in the free states of the Union, is not denied by the more intelligent and reflecting among the whites; and the evil is the greater, as there is no probability that the distinction of colours will be soon effaced.

A SHORT ACCOUNT OF THE STATE OF EDUCATION IN SWEDEN.*

THE establishments for public education in Sweden may be divided into four principal classes: 1st, schools for the common people (*Folk-Skolor*); 2nd, elementary schools; 3rd, the universities; and 4th, schools or learned institutions of practical application.

Before we enter upon a more particular description of the schools in Sweden, it is necessary to make some general remarks on the condition of the establishments for public instruction in this country.

Gustav Vasa reformed (1527) the catholic religion, and diffused the protestant or Lutheran doctrine over the whole country. His reform was so deep and so well adapted to the wants and to the character of the people, that very little change or progress has been made in this way since his time.

The university of Upsala existed before the time of Gustav, as well as different cathedral schools established at the residences of the bishops; but the only object of the instruction in these institutions, was to form civil functionaries and clergymen, and so it has for the most part continued to the present age.

* This communication is from Colonel Carl Forsell, of Stockholm.

Great attention was paid in former times to public instruction, and Sweden is much indebted for her past time of glory to the exertions in favour of learning of Gustav Vasa, from 1527 to 1560; Charles IX., from 1597 to 1610; and Gustav Adolf, from 1610 to 1632. John III. enacted in 1574, that every nobleman, who was not a well instructed man, should lose his privilege of nobility. Charles XI. enacted in 1684, that every one of his subjects should be able to read, that the curate should examine him in religion before he was admitted to the holy sacrament, and that nobody should be married who had not been confirmed.

Both these regulations or enactments seem to be the true reason why the Swedish nobility gained so high a consideration in the 16th and 17th centuries, as well as why the Swedish peasantry has been hitherto regarded as the most religious and the best instructed working class in Europe.* In recent times, however, other nations have far surpassed us, a fact which shows, more than any thing else, that nothing stands still in society, and that it requires as much labour to maintain an honourable place in the rank of nations as to gain it.

Many interesting inquiries into the state of the public establishments for education have been made under the reign of our present king, and as a result of these inquiries, an elementary school has been established in Stockholm, to determine, 1st, the best methods; 2nd, to what extent the different branches of science are to be taught; and 3rd, the time necessary to acquire them.

The definitive object of this school has, however, not yet been attained. Of late public education, and particularly that of the peasants, has been very much discussed. In the present diet, a number of motions have been made with the view of ameliorating, or rather extending and facilitating the means for the lower classes obtaining instruction. Schools are founded or growing up every where. As to what course of instruction ought to be prescribed for the schools of the common people, the committee for the revision of public education, formed by an order of the king in 1825, have given the following as their general opinions.

1.—SCHOOLS FOR THE COMMON PEOPLE (Folk-Skolor).

In every community, where circumstances allow, there ought to be established regular parish-schools, where youth may be instructed in reading, religion, and the history of the Bible, church-singing, arithmetic, writing, and gymnastic exercises,

* There is not one in a thousand who does not know how to read in Sweden.

together with swimming. Reading ought always to be united with the history of the native country, and the elements of geography, as well as with a short account of the constitution of Sweden and Norway, their situation and productions. A library stored with useful books of a popular character, as is the case in various country-schools, might afford inestimable advantages for a more general diffusion of useful knowledge among the poorer classes of people. To writing are sometimes added lessons on the general principles and character of the native language.

Elementary drawing (*linear-teckning*), which constitutes a branch of instruction in certain lower schools of Sweden, should certainly be a part of the education of all orders. It is commonly confined to the slate, and consists, as is well known, in teaching to draw straight and curved lines, making regular figures, and, finally, in drawing various real objects. Symmetrical figures, or compositions expressing merely symmetry, such as architectural ornaments, patterns of vessels, furniture, &c., need only be drawn on slates during the lesson, and may afterwards be copied at home into books, with lead pencil. There is little doubt that those who after leaving school enter into trades, may derive the greatest advantage from these drawing lessons, which develope and cultivate a taste for beauty and symmetry of form. Such practice will undoubtedly soon have a beneficial effect on all the great branches of national industry, where the taste of the workman is called into action.

With the exception of those parishes which have their own school-fund arising from the interest of certain sums designed for the purposes in question, and vested in land, or arising from certain taxes paid by the inhabitants, the common revenue of a teacher in a parish-school, consists of voluntary contributions paid by the parishioners, and other accidental remunerations. The teachers are in general appointed by the bishop of the diocese.

No particular method of teaching is prescribed in these schools, but a wish is expressed that the mutual instruction, (*Lancaster method*) may be more generally employed, and for this reason a normal-school is established in the capital, with a seminary for the instruction of teachers in this branch of education.* Other establishments of this kind, which are not placed under the direction of the parishes, such as schools

* The number of children in this school is about 240. Last year 23 teachers were examined. Teachers can obtain testimonials as to their ability in other Lancaster-schools, besides the normal-school in Stockholm. The expenses of the normal-school last year, lodgings not included, amounted to 2,200 dollars banko, or £180 sterling.

founded within a mining district, iron-work, or other manufactory, are obliged to follow the regulations of the consistory or curate.

Besides the stationary or fixed country-schools, there are also, in some districts, ambulatory school-masters, who proceed from one district to another, and remain a certain time in every station, in order to instruct the children of the neighbourhood in the elements of learning. None can be appointed to this charge without being previously approved by the curate of the parish.

The obligation of teaching the children to read in books, to know the catechism and the history of the Bible, has, from the remotest time, been imposed on the children's parents; but in proportion as civilization has advanced, and instruction has been extended to arithmetic, writing, geography, and history, the duty of teaching must be transferred to particular teachers. This is the history of all schools.

It is not known how many parish-schools we have in Sweden, but to judge from the printed accounts of the Consistory in Wexiö, it seems that more than half of all the parishes are without them. It is, for example, stated, that in the government of Wexiö, with 86 parishes, no more than 29 have either fixed or ambulatory schools. In the government of Iönköping, with 130 parishes, there are schools in no more than 25. In the government of Carlstad with 85 parishes, there are 40 schools, &c.*

2.—ELEMENTARY SCHOOLS.

According to an order of the Government of the 16th Dec. 1820, the schools in question are divided into two different classes, viz. 1st, learned schools (*Lärdoms-Skolor*), and 2nd, real schools (*Apologist-Skolor*.)

In the following remarks on the organization of these establishments, we shall endeavour to exhibit a sketch of their actual condition. Consequently it is necessary to explain their object and operation, as well as the subjects which are taught there.

In the elementary schools, two systems may be distinguished, namely, one for the literature of the classical languages, united with that of the modern, and the other for the last-mentioned languages, apart from classical learning. But the real sciences are uniformly taught in both systems. In the former system, the Latin, Greek, and Hebrew, as well as the three modern lan-

* The number of schools in Sweden conducted on the principle of mutual instruction, or as they are by us called Lancaster-schools, amounted last year to 323 with 19,682 children.

guages are learned: a dispensation is however allowed from one or two of the last-mentioned. In the latter system, the French, English, and German languages, are taught, so that one of them may be mastered to the ability of speaking and reading it, but the other two must be well understood. A dispensation from any of them may indeed be obtained; all dispensations however from learning any foreign language, are given on the strictest condition, that the same time must be employed on a more complete study of another language. No dispensation is allowed for any subject belonging to the real sciences.

The subjects taught in the elementary schools are as follows: (*a.*) real sciences; 1st, religion, ecclesiastical history, and theology; 2nd, geography, history, and politics; 3rd, geometry; 4th, elements of physics, chemistry, and natural history: (*b.*) languages; 5th, the Swedish language, its history, and literature; 6th, Latin; 7th, Greek; 8th, Hebrew; 9th, French; 10th, German; and 11th, English: (*c.*) arts; 12th, calligraphy; 13th, drawing; 14th, gymnastic exercises; 15th, singing church hymns with music; and (*d.*) all of which have reference to education in general: 16th, philosophy, elements of anthropology, or psychology, and logic, together with universal grammar, and the history of human civilization.

The principal methods of instruction employed, and on which opinions have been considerably varying, are three, viz. (*a.*) the instruction given by every teacher within his own class, (*Klass-Läsning*); (*b.*) the ambulatory instruction, (*den ambulatoriska*), and (*c.*) the instruction of matters, (*Ämnes-Läsning*.) The first-mentioned is the method of late employed in the Swedish schools, by which all subjects taught are treated and communicated by the same teacher, whose care and activity are confined to his own class. According to this method the scholar can be transferred from a lower to a higher class only once a year, and he must be equally advanced in all the subjects taught in the class, and those only can be transferred, who have mastered the subjects during the stated term. • Before the expiration of this term no transfer takes place, though a pupil may, by the progress he has made, sooner be qualified for a higher form. Instances of the contrary case must only be considered as extraordinary exceptions to the general rule.

The ambulatory method, which has hitherto been employed in the Swedish gymnasia, is distinguished from the former in this, that every teacher treats only certain kind of matters through all classes from the first to the last. The third method above mentioned is at present employed specially in the royal military academy at Carlberg, near the capital. Like the

ambulatory method, it is applied by one teacher through all classes of the establishment, the youths being, however, not at all bound to certain times of removal from or to other classes; every one may solicit a special examination in any branch of knowledge, in which he has made due progress, and be elevated to a higher class, in order to carry to greater perfection this branch of knowledge, together with the pupils of this higher class, though he still remains in a lower class as to other matters of learning.

The ambulatory method has been found more efficient than the instruction given by teachers within their own classes, and ought to be employed in all elementary schools, for which purpose new courses and books of elementary instruction are already prepared.

The Gymnasia, which are the principal schools of learning, are commonly divided into two circles and four classes, with six or seven teachers, viz., two lecturers for theology, one of whom must read Hebrew, one for history, one for mathematics, one for logical and physical sciences, one for the Greek, and one for the Latin language. Besides these teachers there is an adjunct constituted who treats of natural history, modern languages, and other branches of learning: he also acts as a substitute of the lecturers. According to the regulations at present established, the term or period of public instruction is nine months annually. Besides the regular teachers, different teachers of drawing, music, and gymnastic exercises, are always to be found in these learned institutions. The average salary of a lecturer amounts annually to 120 tons of corn*.

Learned schools in a stricter sense, as separated from the gymnasia, are divided into higher and lower. Of the first-mentioned kind are the cathedral schools, from which scholars may be sent directly to the universities.

Some of these learned institutions, especially the gymnasia, are richly endowed, partly by private individuals, and partly by the state; annual stipends are given in these places to some of the pupils.

The number of teachers at the said schools varies in proportion to the wealth and population of the neighbouring country, and other circumstances. They generally vary from three to five or six, with a rector (head-master) at their head; their salaries depend in general on the price of corn, being so calculated, that a rector of a learned school of the higher order

* A ton or tunna in Sweden, consisting of half rye, half corn, contains about half of an English quarter. More exactly: a quarter=111 Swed. kans. A tunna=63 do. do. It is by law prescribed, that a ton of corn in the appointments of functionaries must consist of half rye, half corn.

enjoys a salary of from 60 to 80 tons of corn at the established price, and the other teachers in proportion. The schools are under the superintendence of the bishop of the diocese, as *ephorus* or inspector.

Once and sometimes twice a year, or oftener, there is a public examination of the scholars, to which their parents and guardians are invited, and on which occasion public testimonials are given them of their progress in learning, and of their moral conduct.

The real schools (*Apologist-Skolorne*), may be considered as a preparatory step for the learned schools, and partly as institutions for the education of youths designed for commerce, or other branches of industry, more weight being laid in these establishments upon knowledge connected with the pursuits of active life, such as modern languages, mathematics, history, geography, &c. The number of the teachers is two, and but seldom three.

According to the report of actual incomes, and of the competency of the salaries for teachers of elementary schools in Sweden, delivered by the committee for the revision of public establishments of instruction, the incomes were for the schools, in corn, 7,657 tons, and in money, 5,839 rix doll., 16 skill.; for the gymnasia, corn, 9,453½ tons. The report in question is accompanied with the following statement, as to an increase of the said salaries, necessary in the opinion of the committee, for the progress of instruction; viz., 12 gymnasia, at 1,225 tons = 14,700 tons; two cathedral schools, at 635 tons = 1270 do.; 12 complete learned schools, at 460 tons = 5,520 do.; 6 others, at 510 tons = 3,060 do.; four school swith four teachers, at 275 tons = 1,100 do.; sixteen with three do., at 180 tons = 2,880 do.; total, 28,530 tons.

3.—THE UNIVERSITIES.

It is in general allowed, that a university, in relation to establishments of elementary instruction, ought to be what is called a higher institution of learning, but the same uniformity of opinion is not found, when the question is to determine the nature and object of the higher education, which is to be given at these learned establishments.

A university is generally considered as a seminary for educating functionaries of the state, where it is necessary that these individuals should acquire the knowledge which they must afterwards employ in the administration of various offices. It is true that the education of public functionaries is a very important object in academical instruction; this however does not express completely the total destination of a

university, and is altogether a narrow and imperfect view of what university education should be. A university, in order to be conceived in its true signification and extent, must be viewed as an institution designed to elevate to a high standard of excellence all those who possess a real native talent for cultivating science and letters, and have been sufficiently prepared by solid elementary instruction. It must be considered as the centre of the scientific culture of a nation, and as the focus of its whole intellectual life.

After having thus generally described the nature and destination of universities, it is necessary to examine how far the views above proposed are applicable to the Swedish establishments in question.

Sweden has two universities, which though established at different epochs, have nevertheless received nearly the same academical constitutions. They are furnished with three different classes of teachers, 1st, professors; 2nd, adjuncts, together with docents (private tutors); and 3rd, masters of languages, and masters for bodily exercises. The faculties are four, with the following teachers.

In the Theological faculty: one professor in dogmatical (or doctrinal) and moral theology; one in the exegesis of the Old and New Testament; one on the history of the church, and prænotiones theologiæ; one in matters connected with the practical functions of the ministry, such as homiletics, catechetics, and pastoral theology. At the university of Upsala there are the above-mentioned teachers, of whom however, the Kalsenian Professor delivers public lectures on theological prænotions, as most nearly connected with dogmatics. At Lund there are only three professors of theology, but a fourth might easily be added by raising the salary of one of the theological adjuncts, and conferring on him the character, title, and functions of professor.

In the faculty of Law: one professor of civil and criminal jurisprudence; another in economical and financial jurisprudence; the latter has not hitherto existed at the university of Lund, but seems to be absolutely necessary. Equally important is a public teacher of the history of the Swedish constitution, administration, and laws; this professorship however has hitherto been wanting at both universities.

In the faculty of Medicine: a professor of anatomy and physiology, who is also engaged to give instruction in forensic medicine or medical jurisprudence; another of pathology and therapeutics, with obligation to treat on medical police; a third of materia medica, and pharmacy; a fourth of surgery and midwifery, is at present established at Lund. In the university

of Upsala this professorship is connected with the duties of the teacher of anatomy and physiology.

In the faculty of Philosophy : one professor for the Roman languages and literature ; one for the Greek ; one for Oriental languages and literature ; one for theoretical, and one for practical philosophy.

One for Æsthetical science, with modern literature and languages. This professorship has hitherto been united at both universities with the duties of the librarian, but ought to be separated from it, in order that both duties may be satisfactorily performed. This has been lately done in Upsala.

Universal History. } These duties have been recently united,
Swedish History. } at the Swedish universities.

Politics.—At Upsala, the Skyttianus Professor delivers lectures on some Roman author ; at Lund, no corresponding professorship exists, nor does it seem to be of absolute necessity.

One for Mathematics, } Exist at Lund. In the university
One for Astronomy, } of Upsala, the Professor of Natural
One for Physics, } History is attached to the medical
One for Chemistry, } faculty ; but in the philosophical faculty, the Borgström Professor delivers public lectures on Economy and Botany.

Besides, there are in each faculty several adjuncts and academical docents (teachers). The functionaries in the academical library are : a chief librarian, a sub-librarian, an ordinary clerk, together with several extraordinary assistants.

Various masters of exercises likewise live in the universities, as for riding, fencing, dancing, together with several teachers of modern languages ; a teacher of drawing, and a master of music.

The salaries of the said teachers are specified in the account given below of the economical condition of the university at Upsala.

This learned establishment, founded in the year 1476, was dissolved in 1583, a new high-school being established at Stockholm by the contrivance of the Jesuits ; it was restored in 1593, after the famous council of Upsala, and established and enlarged by Gustav Adolphus, 1621-24.

The actual income of this university arises from the rent of various pieces of property given to it principally by the last-mentioned king of immortal memory, as well as by his father Charles IX., and his daughter Christina ; not to mention various royal benefactors of later times, of whom Gustavus III. and Charles XIV., have made their renown eternal in the annals of the university. The income further arises from

lands purchased by the university with its own funds, from the crown-tenths of several parishes in the northern provinces, &c. ; from donations of private persons, consisting of landed property designed to furnish salaries for various academical teachers, or allowances for the students, &c. The university possesses various edifices necessary for a learned institution, together with a considerable library and several scientific collections. The income of the library is, however, so inconsiderable, that this institution, although richly supplied with precious manuscripts and ancient works, is ill provided with new works and scientific instruments*.

The incomes already referred to, with the exception of the donations of private individuals for special purposes, are as follows :—8998 tons of corn valued, at a low rate, at 69,734½ rix-dol., at 7½ rix-dol. per ton†. The above-mentioned private donations amount on an average to 40,000 rix-dol. a year. The total of various capitals and properties given by private individuals as funds for students at Upsala, has now increased to more than 200,000 rix-dol., and the annual income from the same to 10,000 rix-dol.

The salaries of the ordinary teachers, which arise from the funds of the university, and are distributed among the various faculties, are as follows :—

Theological faculty.—3 professors, with 165 tons of corn each=495 tons.

These professors, and a fourth, salaried by the Kalsenian fund, are thus furnished with salaries. Three adjuncts, of whom two have 65 each, making 130 do., and the third has a prebend‡. The teachers likewise have salaries.

Juridical faculty.—2 professors, with 215 tons each, = 430 do. ; 2 adjuncts, with 65 do.=130 do. Total, 560 tons §.

Philosophical faculty.—14, of whom 11 professors, at 215 tons each, = 2365 do. ; 1 astronomical observer, 90 tons ; 5 adjuncts at 65 tons each, = 325 do. Total, 2780 tons.

To the functionaries at the library.—The chief librarian as professor of literature, has been already mentioned as a member of the philosophical faculty. The sub-librarian has 75 tons, together with 40 rix-dol. from the stipendiary fund ;

* The income of the library has been lately doubled, and the librarian is travelling in southern Europe, provided with a considerable sum for the purchase of valuable works.

† The present exchange gives 12 rix-dollars and 16 skillings to the £ sterling : 48 skillings = 1 rix-dollar.

‡ A prebend is a stipend arising from a foundation. The salary comes from the government.

§ There is lately instituted an adjunct, who must read the history of the law, together with the old landscaps-laws of Sweden.

and the clerk 20 tons: Total, 95 do. The clerk has also 33½ rix-dol. from the stipendiaries' fund.

To the administrative functionaries of the university the following annual salaries are given: to a treasurer, 218 tons; to a camerary (sub-treasurer), 115 do.; to a contorist (clerk, as in a counting house), 50 do.; to a secretary of the chancellor, 70 do.; to a secretary of the university, 115 do.; to a notary of the academical consistory, 50 do.; to a cancellist (copying clerk), 35 do.; to a procurator of the university, 35 do.; to the inspectors of the treasury, 10 do. Total, 698 tons.

Pensions to various academical functionaries and their wives amount to 750 tons. The salaries for teachers of riding, fencing, and dancing, together with those of modern languages, and a director of music, amount to 250 tons. Among the royal stipendiaries there is annually distributed a sum of 1788 rix-dol.; to the academical library, 750 rix-dol.; to the hospital, 450 do.; to the botanical garden and cabinet of natural history, 675 do.; and to various other institutions, 545 do.

According to official reports the average expenses of the university amount to 7654 tons of corn annually, equal to 51,026 rix-dol. 32 skillings, at 6 rix-dol. 32 skill. per ton, besides 23,111 rix-dol. in money: Total, 74,137:32. The income is above stated at 75,419:32, at the rate before mentioned.

The debt of the university to the public fund and to private individuals was, in 1828, 108,134:36.11 rix-dol. Her resources at the same date were 105,103:30 rix-dol., and consequently her real debt, 3031:6.11 rix-dol., which has however somewhat increased since that time.

As to the southern university of Sweden, that of Lund, an official account of its economical condition gives the following results:—

Her principal income and rents arise from the crown and church-tenth (Kyrk-tionde), as it is called, from various southern provinces of the realm, to the amount of 5,934 tons of corn, together with the annual rent of 3,600 rix-dol. of her capital out at interest, to which are to be added 1514 tons of corn, as the rent of her prebends and landed property, as well as 490 do., as a portion of the general salary fund of the universities.

The annual expenses, according to the rate of salaries at present established, are as follows:—To 13 professors at 300 tons of corn to each, and to one who is also pastor of the cathedral, 100 do.: Total, 4000 do.—To 3 professors at 250, do. each: Total, 750 do.—To a sub-librarian, 60 do.; to the treasurer,

250 do. : to the demonstrator of botany and the prosector of anatomy, 60 tons to each, making in all 120 do. ; as an equivalent for the late pecuniary incomes of the adjuncts, 50 do., are already deposited; in the nature of salaries during the life of the holders, 1514 do. are likewise enjoyed : Total, 6744 tons.

The expense last mentioned is to be reduced into the general salary-fund, according as the present holders die off, in conformity with the regulation of 1807, according to which no professor is hereafter to receive a greater salary than 300 tons.

At present, however, the salaries of late established amount from 400 to 500 tons, including the aforesaid salaries. By this arrangement the salaries of the adjuncts, which to a great extent have been paid in money, will hereafter be paid to them in corn, by which measure they are to receive a salary of 50 tons a year, instead of 150 rix-dol. only, as hitherto has been the case. The ordinary salaries of the university are calculated at an average sum of 2,320 rix-dol. ; salaries of adjuncts not yet changed into corn payments, 1243 do. ; royal stipends, 846:32; various annual expenses, 3500 do. From 1809, however, to 1825, the public provision for the maintenance of this university was so insufficient, that it was obliged to exceed it to the amount of nearly 40,000 rix-dol.

How far such expenses may be brought within the actual income, will depend altogether upon the prices of corn established at various dates ; consequently, if these prices fall in any extraordinary proportion as compared with other articles, the income will be by no means sufficient for the necessary expenses, and the capital fund of this establishment must necessarily be resorted to.

Private endowments and stipends.—The famous orientalist, M. Norberg, has bequeathed a sum of 16,666 rix-dol. 32 sk. B^{co} the annual rent of which is to be paid to a professor of modern languages, who thereby enjoys a special salary of 150 rix-dol.

The late professor Frozelius instituted an adjunct lecturer on economy, together with a salary for the same purpose ; this fund, however, has been mixed with the income of the university, and the salary in question is at present paid by the university.

The capital stock of stipends, founded by private liberality, amounts to more than 30,000 rix-dol., the income of which is distributed among various members of the university, according to the regulations.

The respective faculties have the power of assigning stipends

to such of the students as have merited them by assiduity and good behaviour. Sometimes travelling stipends of considerable amount are allowed to young men of talent, who after having finished their studies at the university, are desirous of improving themselves in certain branches of knowledge.

The ordinary income of the library amounts to 800 rix-dol. a year, besides 100 tons of corn, which is the rent of various landed properties belonging to the university.

The *fiscus pauperum*, by which poor and sick students are maintained, has increased to more than 1200 rix-dol.

For obvious reasons it is necessary for the maintenance of a true scientific spirit of academical learning, that the instruction should consist of lectures, public or private, united as hitherto with exercises in disputation, repetitions, and various written exercises, by which the diligence of the student is called into active exercise, the business of the teacher consisting only in directing the diligence of the student to the most useful objects.

The scientific courses of the various teachers are announced, at the beginning of each academical term, before the respective faculties, and regulated in conformity with their directions. It is also found convenient to have suitable books and scientific works published by the teachers.

The king, after having heard his council, appoints the ordinary and extraordinary professors; the other functionaries of the universities are named by the chancellor, who is always the crown-prince of Sweden. The pro-chancellor (vice-chancellor) of the university of Upsala is the archbishop, and of Lund the bishop of Lund.

It is a recent privilege of the Swedish universities to choose their own rectors, who preside in the academical consistory, and to whose decision matters of great importance are referred; the faculties with a dean (decanus) at their head, decide only on matters concerning the students of their respective bodies.

To the consistory belong likewise the superintendence and management of all the literary and economical institutions of the university, its collections of various kinds, its landed property and finances.

The academical teachers are in general bound to deliver public lectures in the respective branches of science, without any separate remuneration from their auditors; but private lecturers are paid reasonable fees.

The total number of students at present at the universities may be stated at 800 to 900 at Upsala, and 400 to 500 at Lund; an inferior class of students, called cautionists, are under the superintendence of academical teachers who guarantee their

making the progress necessary for undergoing the students examination within a stated period.

As a preliminary to being admitted as an academical citizen, an examination before the dean of the philosophical faculty and five adjuncts, called Student-examen, is to be undergone, at which the candidate has to prove his knowledge of the subjects taught at the gymnasia and the several learned schools. This examination is not limited to particular times, but may be requested at any time during the actual semestre or term.

The examinations requisite in order to obtain civil or legal employments of any importance are :—*Hofrätts-examen*, to be undergone by those who wish to be promoted to functions in the courts of law. The subjects of the examination are general jurisprudence, private and public law of the country, &c. *Canzli-examen* for those who are to be employed in civil and ministerial functions; *Cameral-examen* for those who seek admission into the public financial offices; *Bergs-examen*, for those who wish to apply themselves to mining business, in which case the subjects of examination are the mathematical sciences and their practical application, physics, chemistry, geognosy, metallurgy, construction of engines, &c. To this examination none can be admitted who have not previously been examined in matters belonging to the *Hofrätts-examen*.

All these examinations are public, and held twice a-year, at the end of each academical semestre or term, by the professors of the different branches of knowledge, who give testimonials of ability to the students.

The public *Specimens* required before conferring any academical degree are, with respect to the philosophical faculty, as follows :—1. An *Examen theologiæ* before all the professors of the faculty of theology.—2. A *specimen stili pro exercitio*, with a dissertation, defended by the candidate as respondent.—3. An *economical examen* in the elements of that science before its professor. After having given the faculty satisfactory proof of his philological knowledge, and undergone a previous *tentamen* before every professor of the faculty, the student is at length admitted to the *examen rigorosum*, in which an extensive and solid knowledge of all matters belonging to the philological and philosophical sciences are required. The testimonials are modified according to the qualifications of the student, as: *Laudatur*, *cum laude approbatur*, *adprobatur*, *admittitur*, &c. Last of all there is a *lectio præcursoria*, or public lecture on a scientific subject, together with a dissertation *pro Gradu Philosophico*, written and defended by the candidate alone.

Promotions in the philosophical faculty have hitherto taken

place every third year ; the number of doctors being commonly fixed at seventy-five.

With the king's permission the respective faculties can also bestow the degree of doctor on men of eminent talents, without their having fulfilled the above-mentioned conditions.

Even in the other faculties solemn promotions are not unfrequently held, especially in that of medicine, provided a sufficient number of candidates can be calculated upon.

As to the theological faculty, the distribution of supreme honours is a prerogative of the king.

The professors of the universities are as follows :

AT UPSALA.

Theological Faculty :

Bergström lately died. Thorsander is already nominated as his successor.

Doct. or Dean Joh. Thorsander, Theol. Dogm. et Moral. Professor.

Ch. E. Fahlcrantz, Theolog. Prof. Calsenianus.

Ch. G. Rogberg, Theolog. Pastoral. Prof.

Juridical Faculty :

Doct. L. G. Rabenius, Jurispr. Œcon. et Commerc. Prof., Knight of the Polar Star.

J. E. Boëthius, Juris. Patrii et Romani Prof.

Medical Faculty :

Doct. P. von Afzelius, Med. Theor. et Pract. Prof. Emeritus, K.P.S.

Ad. Afzelius, E. O. Med. Prof., Member of the Royal Academy of Sciences.

H. W. Romanson, Anat. et Chirurg. Prof.

G. Wahlenberg, Med. et Botan. Prof. M.R.A.S.

J. Hwasser, Med. Theor. et Pract. Prof., Knight of the Russian Order of St. Vladimir.

Philosophical Faculty :

Mr. O. Kolmodin, Eloq. et Polit. Prof. Skyttian, K.P.S.

Doct. J. Svanberg, Mathem. Infer. Prof., K.P.S.

Mr. T. Bredman, Astron. Prof., M.R.A.S.

S. Grubbe, Ethic. et Polit. Prof., K.P.S.

E. G. Geyer, Histor. Prof. K.P.S.

L. P. Walmstedt, Chemiæ Prof., M.R.A.S.

P. D. A. Atterbom, Log. et Metaph. Prof.

Fr. Rudberg, Phys. Prof., M.R.A.S.

P. Sjöbring, Lingu. Oriental. Prof.

T. H. Schröder, Hist. Litt. et Archæol. Prof. and Chief Librarian.

J. Törneros, Eloqu. et Poës. Prof. Adjunct, Professor of the Greek Langu. and of Pract. Œcon.

AT LUND.

Theological Faculty :

Dean or Domprost, A. J. Hellstenius.

Doct. M. E. Ahlman, *Seminarii Direct. et Theol. Prof.*

Theolog. Professor, Joh. Henr. Thomander.

Vacant: Two Professorships of Theology.

Juridical Faculty :

Mr. Fr. Cedersköld, Jur. et Moral. Prof.

Doct. J. Holmbergson, *Juris Patrii Prof.*, K.P.S.

Medical Faculty:

Doct. A. H. Florman, Anat. et Chir. Prof.

C. F. Liljevalch, *Artis Obst. Prof.*

J. Sönnnerberg, *Med. Pract. Prof.*

J. B. Pramberg, Anat. Prosector, Anat. et Chir. Prof., E.O.

Philosophical Faculty :

Mr. C. A. Agardh, Botan. et Œcon. Pract. Prof., K.P.S., lately
nominated Bishop of Carlstad.

Doct. J. A. Engeström, Chem. et Phys. Prof.

Mr. J. Brag, Astron. et Phys. Prof.

Doct. And. Otto Lindfors, Eloqu. et Poës. Prof., K.P.S.

J. Stecksén, *Prof. Lingu. Gall. Germ. et Angl.*

E. S. Bring, *Histor. Prof.*

C. G. Brunius, *Græc. lingu. Prof.*

B. M. Bolméér, *L.L.O.O. Prof.*

L. F. Westman, *Philos. Theor. Prof.*

C. J. D. Hill, *Mathem. Prof.*

Magister Sven Nilsson, *Hist. Natur. Prof.*, Knight of the Order of
Wasa.

Vacant: The Professorship of Literature, and that of Natural
History.

4.—SCHOOLS OR LEARNED ESTABLISHMENTS OF PRACTICAL APPLICATION.

If, in order to exhibit human knowledge as an organized whole, closely connected in all its various elements, there is no expedient more suitable than to unite all branches of knowledge in one great institution, or university, where all may have their representatives and teachers—it must be admitted, on the other hand, that human civilization, if confined to a few men of scientific and learned pursuits, must necessarily have an influence too narrow and limited on the affairs of the community, and on the labours and arts of common life. If institutions of merely theoretical knowledge are to become useful, scientific speculation must be stimulated by schools of practical

application, which will render scientific inquiries more active by bringing them to bear on the labours and the happiness of the great mass of society.

Several of these schools of application have already been treated of in the preceding remarks. A few observations may be sufficient for the rest.

For the military order a special academy is established at Carlberg, where instruction is given in all matters connected with military science and art. At Marieberg, near the capital, there is also a school for youths, who wish to apply themselves to artillery, &c. Besides these, various establishments are founded with the view of improving the education of those who seek employment as officers. At Carlskrona there is also a nautical school of greater extent.

As to medicine, an important establishment for practical teaching exists in the medico-chirurgical institution at Stockholm, which contains a larger number of teachers than any academical faculty of this nature, and also treats the scientific part of the subject to an equal extent.

For the trades, we may particularly mention the veterinary establishments at Stockholm and Skara, the technological institution in Stockholm, and Chalmers' technological school at Gothenbourg, the royal forest establishment, the central institution of gymnastic exercises; the Bergian school for gardeners, the school for mining business at Fahlun and Philipstad; those for music and the fine arts in their respective academies.

SUPPLEMENT TO THE ACCOUNT OF ESTABLISHMENTS FOR PUBLIC INSTRUCTION IN SWEDEN.

Extracted from a Statistical Work on Sweden, published in Stockholm, 1833.

THE UNIVERSITIES AND SCHOOLS.

The number of students at the universities of Lund and Upsala was, in the year 1830, as follows :

Name of the University.	Number of Students.	Present during the Terms.	Of Theology.	Of Jurisprudence.	Of Medicine.	Students of Philosophy.	Without certain Vitæ Genus.	Royal Stipendiaries.	Private Stipendiaries.
Upsala	1453	844	336	325	86	365	341	37	150
Lund .	632	421	141	105	56	169	161	52	26
Total .	2085	1265	477	430	142	534	502	89	176

APRIL—JULY, 1835.

Name of the University.	Sons of Noblemen.	Sons of Priests.	Sons of Burghers or Traders.	Sons of the Peasantry.	Sons of Functionaries.	Sons of other Gentlemen, or Stånds Personer.	Students below 15 years.	Betw. 15 and 20.	Betw. 20 and 25.	Betw. 25 and 30.	Betw. 30 and 35.	Above 35 years.
Upsala .	153	334	245	212	310	199	11	381	699	301	48	13
Lund . .	26	165	140	143	132	—	10	210	250	126	26	10
Total . .	179	499	385	355	442	199	21	591	949	427	74	23

According to statistical accounts (*vide* Granberg, vol. ii. p. 208), the proportion of students to the whole population of Sweden was the following: in the government of Linköping as 1:433, in that of Östersund 1:448, in the city of Stockholm 1:474, in the government of Gefle 1:503, in that of Stockholm 1:510, of Nyköping 1:511, Westeras 1:514, Upsala 1:626, Mariestad 1:652, Jönköping 1:653, Wexiö 1:626, Umeå 1:683, Halmstad 1:780, Calmar 1:964, Örebro 1:1008, Malmö 1:1165, Carlstad 1:1826, Wenersborg 1:1251, Wisby 1:1669, Christianstad 1:1875, Gothenburg 1:1879, Fahlun 1:1930, Piteå 1:2438, and in that of Carlskrona as 1:2606.

Supposing, as is stated both in the last-mentioned account and in various other works, that the number of students is too great in proportion to the mass of people, and ~~water~~ later in Sweden than in other countries, it seems to be a natural conclusion, that the government of Carlskrona ought to be in this respect the best regulated; and that of Linköping the worst*.

The author, however, cannot admit the supposition farther than this, that if students are unwilling to go to trades, and wish to get employment as public functionaries, it is to be feared that discontent rather than real advantages must be the result of their literary labours. The aversion to going back to the industrial classes, too often observed in the rising generation, or youth of our days, may indeed be attributed not so much to the usual pride of youth, or to a false estimate of the real difficulties of employments in the public service, which they are apt to overlook in consideration of the secure income; but rather to the corporation statutes and economical regulations, by which parents who can afford to give their children a good education, are deterred from obliging them to undergo an apprenticeship of many years to some art or trade which they could easily learn within as many months.

* According to the German gazette (Politisches Journal) of 1818, the whole number of students in Germany amounted to 9,791, foreigners included; but if they were in the same proportion as in Sweden, they would have been 27,000. In France, during the year 1830 (*vide* "Le Temps") out of 294,975 youths of the age of conscription, 153,635 were neither able to read nor to write.

In Sweden there are about 324 young noblemen, between 15 and 25 years of age. The statistical account, before alluded to, shows, that only 179, or half of this number, frequent the universities.

The report of the committee for revising the elementary schools of Sweden, delivered the 13th Dec. 1832, contains the following statements :

From the beginning of the autumnal term 1824, to the end of the vernal term 1832, matriculated scholars :—

In the Gymnasia	1,754
Lärdom-Skolor	5,742
Apologist-Skolor	3,699
Total	11,195

Left during the same time—

From the Gymnasia	1,467
Lärdom-Skolor	2,934
Apolog.	1,443
Total	5,844

With respect to age,

Below 10 years	3,560
Between 10 and 12	3,065
12 — 15	2,665
15 — 20	1,778
Above 20	127
Total	11,195

With regard to different orders : noblemen 572, children of the clergy 1410, of gentlemen 3,499, of burghers 2,899, of the working class 2,815 = 11,195. According to an average account, there have been 1,197 wealthy scholars out of 9,427, 4,152 in good circumstances, 2,482 in indifferent circumstances, and 1,596 poor.

The number of scholars during the spring term of 1832, compared with the population of 1830, was as follows : in the city of Stockholm as 1:437, in the diocese (Stift) of Wisby 1:293, in that of Strengnäs 1:437, of Linköping 1:465, of Hernösand 1:518, of Skara 1:546, of Upsala 1:565, Wexiö 1:590, Westerås 1:652, Calmar 1:829, Lund 1:1085, Gothenburg 1:1097, Carlstad 1:1479, and in the whole country as 1:570.

At the above-mentioned schools, in the year 1830, 48 teachers had not quite 10 scholars each to instruct.

The number of elementary schools was 66, the teachers 282, the scholars 4,540 ; consequently at each school there were four teachers with 65 scholars, and on an average 15 scholars for every teacher. In the diocese of Linköping there were 609, Upsala 551, Strengnäs 483, Skara 445, Hernösand, 445, Lund 393, Wexiö 381, Westerås 351, Gothenburg 297, Carlstad 158, Wisby 119, Calmar 108 ; at Carlskrona the number of scholars was 10, at Helsingborg 26, Landskrona 25, Ystad 31, Christianstad 32, Carlshamn 37, Hernösand 87, Frösö 57, Sundsvall 40, &c.

The public schools of elementary instruction at Stockholm were attended in the year 1833 by 1237 scholars.

During the last twenty years, a considerable reform has taken place in the schools, and this reform, which is still in progress, is tending to render them better adapted for the more general diffusion of such knowledge as at present is required in practical life. They have till lately been principally used as establishments for educating clergymen and civil functionaries, but since the middle class has begun to acquire its present position in the history of modern times, and since the sciences, applied to all branches of industry, have proved to be of such great importance, the acquisition of these sciences has become a matter of necessity.

The sciences required for cultivating land on a large scale are so multifarious and extensive, that they may be considered as fully equivalent to all knowledge whatever; but how few possess such a knowledge, and where is it to be acquired? * Many of our landed proprietors leave the superintendence of their estates to individuals either totally ignorant, or with little practical skill in the most general branches of agriculture. This custom has caused the ruin of many of these landowners; and while they have directed their utmost efforts to acquire an income of a few hundred dollars, in the capacity of public functionaries, they have lost as many thousands on their estates. A conviction, however, seems to be gradually forming, that science, with regard to agriculture, is by no means a useless product of the understanding, but rather a powerful means of increasing wealth. We may hope that the gentry will soon begin to prefer the less ambitious life of a private gentleman to the imaginary importance attached to public functions. This will, undoubtedly, be the case when they are resolved to acquire the sciences necessary for understanding the rational principles of agriculture. Our liking of a subject depends on our knowledge of it, and the more the landed proprietors study the principles of nature, and the more their efforts are rewarded by profitable results, the greater will be their love for agricultural and other similar occupations.

* The present Diet has given 5,000 dollars annually to an agricultural institute at Degeberg, in Westgothie. The Director is Mr. Nonnen: there are already above 20 élèves.

Literary Statistics of 1830.*

			Rix	Dol.	Skil.
Theology, Number of published works	121	valued at	40	0	
Philosophy	11	.	8	28	
Philology	29	.	3	24	
Education	32	.	25	44	
Belles Lettres (52 Novels) . . .	134	.	92	28	
Historical Sciences	88	.	90	26	
Geography	30	.	26	32	
Statistical Sciences	77	.	25	38	
Physical ditto	20	.	27	0	
Medical ditto	20	.	11	20	
Economy	35	.	11	40	
Geometry	25	.	5	32	7
Juridical Sciences	46	.	14	34	
Fine Arts	4	.	3	32	
Miscellaneous	43	.	41	36	
Total			429	30	

In the year 1809, the number of gazettes in the whole country was 28, of which five were published in the capital, and the rest in the provinces; in 1833 they amounted to 80, of which 19 were published at Stockholm. The journals and periodical works had at the same date increased to 20, of which 15 were published in the capital.

CARL AF FORSELL.

Stockholm, March 31, 1835.

EDUCATION IN KENT.

THERE is nothing of higher importance to the general interests of a community, than the education of its members. Whether the various systems of education be right or wrong; whether their foundation be secure or weak; whether places of education be well or ill-directed, are questions involving considerations of the highest importance to every community. We take it for granted that education of some kind is neces-

* According to recent observations in England, every volume of 500 pages on good paper costs 12s. sterling. Printing, paper, binding, advertisements, &c. 177l. sterling: fixed duties, 31l. 16s. Profit to the author, 22l. 9s. sterling.

Of 130 works printed in London, only 50 paid their expenses. Of 80 works, only 13 that paid came to a second edition. Generally speaking, one-fourth of published books do not pay the costs, and of pamphlets, not one out of fifty. Each advertisement in the English newspapers, be it short or long, lately cost 3s. 6d. as stamp-duty, besides the newspaper charge for publishing. This duty, so heavy and so pernicious, both to the general diffusion of knowledge and to trade, produced to the revenue of Great Britain 173,000l. sterling a year. This duty has been recently reduced to 1s. 6d. on each advertisement. Of every work printed in Great Britain and Ireland, 11 copies must be gratuitously delivered to certain public libraries.

sary for people of all classes: this is, indeed, now a generally acknowledged truth. But education may be either good or bad: it is not enough that there should be education; it should be good education; and education cannot be good unless it is systematically organized, unless it has certain defined and useful ends in view, and unless it employs means adapted to attain these ends. In a well ordered state, it must be the object to make everything subservient to the strengthening and upholding of its polity, and in order to that end its members must be trained under the superintendence of the state. This it is which makes it the interest of the state, and gives the state its right to look to the education of its members; to see that all who shall be so situated as to have any influence upon its happiness or safety, shall be, at least, not brought up in such a way as to be dangerous to either; for that would be to form instruments to its own damage, and, perhaps, its ruin. We may go further, and say that it is a moral obligation on the sovereign power in a state, to see that education shall be directed to the attainment of these objects. The state, having such an interest in the education of its members, is under a paramount duty to see that any provision which has been given in order to promote education, shall be well applied. When funds have once been given for public purposes, the whole community is concerned in their proper application; they become part of the public revenue, so far as their design reaches. We advocate no diversion of purpose, so long as the purpose is one not injurious to the State, no general appropriation of a specific grant; we only contend that the trustees of such funds ought to be made responsible to the State for the right administration of them. Lapse of time has done much towards throwing into abeyance many noble benefactions, and so disappointing the intentions of pious and patriotic founders; but neglect has done more. They, whose especial duty it has been to promote these good purposes, have often entirely neglected their trust; and the very perversion of purposes thus caused has prevented the close scrutiny which ought to have been exercised by the public. For people have feared to expose themselves to the odium attached to prying into matters of this kind: they have been unwilling to be taunted with interfering; and, what has been the consequence, but that the public have been the sufferers; and that what was originally framed and calculated for universal and lasting benefit, has often degenerated into mere sinecures, and remains now only the monument of former benevolence? We admit that, in the county of Kent and else-

where, there are many endowments of a different description ; that there are some in which the designs of the founders are strictly adhered to ; and in which a conscientious regard is paid to the purposes of the institution. Inquiry cannot be detrimental to them ; neither will they seek to avoid it. The more they are known, the more will their usefulness be extended.

We here propose to give an account of the state of public education in Kent ; comprehending the schools for the rich, and the schools for the poor ; the schools for the highest branches of education, and those in which the most necessary knowledge only, the knowledge within reach of, and adapted to, those who are destined to the lower occupations of life, is dispensed. Our plan will embrace the endowed grammar school, detailing its purpose ; its date ; its founder ; its means, or income ; the manner in which its income is disposed of, in salaries to masters, in allowance to scholars at school, or in exhibitions at the universities ; the terms of admission ; with as accurate a statement as can be had of every necessary charge or expense,—endowed schools, not grammar schools, under similar arrangements,—proprietary schools—national schools, for the education of the poor, how supported, managed, and attended,—schools, on the British or Lancasterian system,—parish schools. If we can succeed in making such a statement as this with any tolerable correctness, we shall have accomplished a useful work. If we can show pretty clearly the state of education in one of our chief agricultural counties, we may form a pretty good guess as to what it is in the rest. A full and impartial examination into the existing state of education in England, especially with reference to endowments, is the necessary preliminary to all attempts at change and improvement, which we confidently expect will not long be retarded when it is known what great resources England possesses for educating all classes of people, and how unsatisfactory are the results compared with the means which the State has at its disposal for the purpose of education. From its position and its resources, the county of Kent is one of the most important districts in England, being populous and wealthy ; and personal acquaintance enables us to say that it is amply supplied with means for disseminating education of all degrees ; and that, where endowments are wanting, as in the case of the poor, it is very remarkable for the liberality with which the requisite funds are contributed.

Endowed grammar schools form the first division of the

subject. The metropolitical city of Canterbury claims the first notice: from it we will proceed in alphabetical order through the several towns and places of East Kent; those of West Kent will be given in a subsequent article.

CANTERBURY.

This city was famous in very early times as a seat of learning. Theodore, who was consecrated archbishop in 660,* and died in 690, founded, by license of Pope Vitalianus, a school or college, which was soon raised into high repute. It has been supposed, that Augustine had previously settled a school here; and it is by no means improbable that he did. We may, indeed, safely conjecture that to every cathedral foundation a school was attached as an essential appendage, and that, in this particular instance, Theodore's school was but a revival and enlargement of Augustine's. Of Theodore's school, however, we may speak with certainty. It long existed in a flourishing condition: how it became merged in what was afterwards termed the Free School, is not apparent; but, an account, which is given by Somner in his "Antiquities of Canterbury," of a suit in 1321, between Ranulph, rector of the grammar schools of the city, and Robert, rector of St. Martin's,† and of the schools there, in which sentence was given in favour of the former, limiting the right of the latter to thirteen scholars, shows its continuance; and Archbishop Winchelsey, who was consecrated to this see in 1293, before whom the suit was tried, was himself a scholar of this foundation. Mention is again made of it in 1375; and, it is likely that the foundation remained until the time of the Reformation, when King Henry the Eighth remodelled it, and formed that which is now called the King's School. That king, in his charter granted to the dean and chapter of the church, made the school a part of the foundation, ordaining it to consist of a master, usher, and fifty scholars, who were to eat at one common table, but the provision made by him could not long maintain this charge. He had at the same time imposed on the dean and chapter an annual burden of two hundred pounds for the maintenance of twenty-four scholars at Oxford and Cambridge, in the advantages of which it is reasonable to suppose this school was to participate. This endowment he speedily revoked; and, in

* Hallam (*Middle Ages*) says 668.

† The school of St. Martin's was kept by 'the Parson of St. Martin's,' as Somner says, 'in right of the church and by concurrent custome.' Ranulph opposed this right.

pursuance of the revocation, took from the dean and chapter more than an equivalent property. If the original intention had been realized and adhered to, the foundation would have been both useful and splendid. The school yet continues according to the terms of Henry's appointment. The upper-master has a salary of 100*l.* with a house capable of accommodating a large number of boarders. The under-master has a smaller salary, with a sufficient house. Both are graduates of the English Universities, and clergymen. The former is elected by the dean and chapter, and the latter is nominated by the upper-master. The scholars are elected by the dean and chapter, with a stipend of 1*l.* 8*s.* 4*d.*, and hold their scholarships five years, their education being cost free. There are likewise two scholarships for relations of the family of Hayman, of which we shall speak in our account of the exhibitions belonging to the school. The instruction is classical and mathematical. Many eminent individuals have been educated here, of whom it will be enough to name Dr. William Harvey, the discoverer of the circulation of the blood; Lord Chancellor Thurlow, Lord Chief Justice Tenterden, and Dr. Herbert Marsh, now Bishop of Peterborough. It was formerly for a long time resorted to for education by the sons of the gentlemen of the county; and, from the character into which it is at present rising, it may be presumed that it will at no distant date be their chief place of education again. 'Of the masters,' says Hasted, the historian of Kent, 'who have presided over this school, many of them have been men of eminence, as clergymen and scholars; one of them I can mention of my own knowledge, and whoever knew him will join in this tribute of justice to his memory, I mean the Rev. Dr. Osmond Beauvoir, late head-master of it, first educated here, and afterwards at St. John's College, Cambridge; whose great abilities brought this school to the highest degree of estimation; who united the gentleman with the scholar; one whose eminent qualifications and courtesy of manners gained him the esteem and praise of all who knew him, many of whom are still living to attest it, and regret the loss of him.' He died in 1789.

EXHIBITIONS AND SCHOLARSHIPS.

HAYMAN.

William Hayman of Canterbury, September 29, 1625, enfeoffed twenty-seven acres of land at Warehorne in this county, five parts in six of the rent to be given to the use of

two scholars in this school; the choice to be of any such as shall be descended,

First, From Peter Hayman, grandfather of the said William Hayman; and, of these, the preference to be given to the surname of Hayman.

Secondly, In default, one scholar to be of the surname of Hayman, born in Kent, or descended of Kentish parentage.

Thirdly, In default, both to be natives of Sellinge, or sons of parents inhabitants of Sellinge; but subject to removal on application according to either of the previous rules. The scholar chosen must be eight years old, and may hold the exhibition nine years; and, if he go to any college in Cambridge, it may be continued to him seven years from the time of his leaving school; and, if he be admitted into holy orders within the first five years of the seven, it may be continued to him three years more.*

ROSE.

Robert Rose, a native of Canterbury, and formerly usher of this school, August 31, 1618, enfeoffed twenty-six acres of land in the parishes of St. Mary, and Hope, in Romney Marsh, for the assistance of four scholars, who had been in this school at least two years before their going to the University, with a preference to such as should be born within or near to the city of Canterbury; to continue seven years, if the exhibitor be unpreferred so long to some living of 20*l.* per annum above the exhibition; and the exhibition to be 6*l.* per annum.†

PARKER.

William Morphett, master of Eastbridge Hospital, covenanted, May 22, 1578, with Dr. Pay, master of Corpus Christi College, Cambridge, with consent of Archbishop Parker, for himself and his successors, to pay to the said master 6*l.* 13*s.* 4*d.*, for the term of two hundred years, for the maintenance of two scholars, natives of Kent, and educated at the King's School; to be nominated by the dean of Canterbury, and the master of the hospital, and to be called Canterbury scholars. Archbishop Whitgift renewed and perpetuated this endowment; but, instead of the dean's, made the archbishop's consent necessary to the appointment. Archbishop Parker also founded three scholarships, out of the rents of certain tenements in Westminster, one appropriated

* Sir H. Oxenden, T. Papillon, Esq., and others, are the trustees, and, with the heir at law of Hayman, nominate to the exhibitions.

† J. Boyle, Esq., G. Stringer, Esq., certain of the prebendaries and others appoint.

to the county of Lincoln, and the other two to natives of Kent, educated at the King's School. The value is about 15*l.* per annum.

ROBINSON.

Henry Robinson, by will dated May 13, 1643, devised property at Birchington and St. Nicholas, in the Isle of Thanet, to St. John's College, Cambridge, for the founding of two fellowships and two scholarships for natives of the Isle of Thanet, educated at this school; in default, for natives of the county of Kent, educated at the said school; and in default of these to boys born within the diocese of Canterbury. The endowment being insufficient for such a foundation, it was decreed by the Court of Chancery, with consent of the college; November 26, 1652, to establish four scholarships in the said college for ever, instead of the two fellowships and two scholarships.

THORPE.

George Thorpe, D.D., Prebendary of Canterbury, by will, 1719, gave to Emmanuel College, Cambridge, certain messuages, &c., in the parish of Ash, near Sandwich, for endowment of five exhibitions, to enable bachelors of arts to reside until they take the master's degree: if there are no bachelors, others may be elected after two years from their residence in college. A preference is given to the sons of orthodox ministers, and to such as have been brought up at this school.

BROWN.

— Brown, in 1736, founded two Greek scholarships in Emmanuel College, which have generally amounted to 8*l.* per annum, in proportion to residence, the residue to be applied to the funds of the College; to be filled by the master and fellows from the King's School; in default, from any school in Kent; then from any other.

STANHOPE.

George Stanhope, D.D., Dean of Canterbury, by will proved May 4, 1728, bequeathed 250*l.* in New South Sea Annuities, to found one exhibition of 10*l.* per annum, for one King's Scholar, to be nominated by the dean and chapter, for seven years, such scholar continuing at some college in Cambridge; but the exhibition to cease at the Michaelmas after commencing master of arts. The principal sum of 250*l.* was transferred by the executors, and accepted by the dean and chapter. The reduction of interest having made an alteration in the annual value, and the exhibition having been

vacant a few years, with the original sum and the interest that had accrued thereon, and a contribution from the chapter, 50*l.* additional stock was purchased, and the exhibition is now of the annual value of 9*l.*

COLFE.

Mr. Abraham Colfe, the founder of Lewisham school, gave seven exhibitions of 10*l.* per annum for scholars from that school at either university; and in default of claimants from Lewisham school, from the adjacent hundreds, and from members of the company of leathersellers, who are the patrons of the school, and possessed of the estates by him bequeathed, he directs these exhibitions to be filled up by scholars from the King's School in Canterbury, and from Christ's Hospital in London alternately. But the leathersellers' company have for nearly a century past refused to admit the claim of either the King's School or Christ's Hospital, alleging a failure in their estate. Will proved in 1657.

SCHOOL-FEAST SOCIETY.

In 1712 a society was formed of gentlemen educated at this school. In 1713 they agreed, with permission of the dean and chapter, to attend Divine Service at the Cathedral, and hear a sermon on their anniversary in the ensuing year, preached by some clergyman brought up at the school. This soon led to contributions for exhibitions at the universities, which have been continued with great success to the present time. The society has numbered, and still numbers in its lists, many persons who were not educated at the school, but who have been desirous of forwarding the objects of it. The patronage and support of the dean and chapter have been constantly and liberally given. The sums invested at various times amounted at the meeting in August, 1833, to 2059*l.* 4*s.* 9*d.*, and the annual subscriptions were then reported to be 95*l.* 3*s.* The exhibitioners are elected, as vacancies occur, after an examination, by some eminent individuals selected for that purpose; and the exhibitions are holden with any others belonging to the school; there are two now in tenure. At the meeting in last year, the Archbishop of Canterbury, the Duke of Wellington, the members of parliament for East Kent, and others, attended. The stewards are generally the Mayor of Canterbury, a prebendary of the cathedral, and two gentlemen of the county. One of the prebendaries, and a clergyman of the city, act as secretaries, and the society has been admirably conducted by their management. 'Since the last anniversary,' says the Report

of last year, 'twenty-one students have been admitted, and the school has again increased from sixty-two to seventy-three. The results of the examination have been exceedingly satisfactory; and though the effects of the system now in operation cannot for some time be fully developed, yet quite sufficient may be seen to justify the most favourable anticipations of the usefulness and importance of this establishment both to the city and to the county at large.' The exhibitions from this society are of the value of 60*l.* per annum, may be holden at either university, and are continued four years.

Of the exhibitions and scholarships previously named, those of the endowment of Robinson, Thorpe, and Browne, have not lately been claimed.

The full expenses of a boarder, not a king's scholar, are somewhat under 70*l.* per annum.

ASHFORD.

Sir Norton Knatchbull, Baronet, in the reign of King Charles the First, began the foundation of a free grammar-school in the town of Ashford, and for that purpose erected a school-house on the east side of the churchyard, which, when completed, he gave for its use; and, having appointed a master, he allowed him a salary of 30*l.* per annum, which, by a proviso in his will, he directed to be of perpetual continuance, charging the payment of it on certain lands in the parish of Newchurch. This endowment, with several other necessary regulations, was confirmed by deed by his executor, Norton Knatchbull, Esq., afterwards Sir Norton Knatchbull, Baronet. The schoolmaster is appointed by the Knatchbull family, and must be a master of arts, at least of one of the two universities. This school has been in considerable repute, and is yet in some estimation. By the statutes, the master is obliged to receive as many boys, children of inhabitants of Ashford, as may be sent to him, and to give them instruction in Latin and Greek; but of late years little advantage has been taken of this privilege, seldom more than one or two attending as on the foundation, while from thirty to forty attend and pay as day scholars, after the rate of 8 guineas per annum. The number of boarders is usually from twelve to eighteen, at present fourteen, the charge being, according to age, 35 or 40 guineas per annum. The instruction is classical and mathematical. The house is well fitted for the reception of pupils. The salary is still 30*l.* Some years ago, the possessors of the estate, when selling off some lands at Newchurch, through inadvertence, sold a small part of the

school land, upon which an engagement was entered into, that, if at any time the produce of the school land should not amount to 30*l.*, the deficiency should be made up, as far as 4*l.* per annum, in lieu of what was sold off. Sir E. Knatchbull is patron and visitor of this school.

FAVERSHAM.

Dr. John Cole, one of the chaplains of the Royal Chapel, and warden of All Souls' College, Oxford, in the eighteenth year of King Henry the Eighth, conveyed to the abbot and convent of Faversham, lands and tenements in this and the neighbouring parishes of Goodneston, Hern-hill, and Leysdown, for the endowment and maintenance of a school, for the instruction in grammar of the novices of the abbey; directing that the nomination of the master should be in the warden and fellows of All Souls, and the admission in the abbot, who should allow him 10*l.* a year stipend, together with board and lodging. Soon afterwards the abbey was suppressed, and the school involved in its ruin, the lands becoming vested in the crown; and, though parts of them were granted away at different times, the chief part remained in the possession of the crown until the reign of Queen Elizabeth. The inhabitants had unsuccessfully petitioned King Henry to re-endow the school; but, on Queen Elizabeth's resting here for two nights, in the sixteenth year of her reign, they were fortunate enough to obtain her consent for its re-endowment upon such of those lands as Dr. Cole had originally endowed it with, which still remained in the crown. By charter, in her eighteenth year, she granted, that the mayor, jurats, and commonalty of the town of Faversham, and their successors, should be governors of the revenues of the school, to be called 'The free Grammar-school of Elizabeth, Queen of England, in Faversham,' and that they should be a corporation for that purpose, and have a common seal; that the warden, or sub-warden, and six senior fellows, of All Souls' College, should nominate the schoolmaster; that they, together with the mayor, jurats, and commonalty, should make rules and statutes for the government of the school; and, upon vacancy of master, if one should not be appointed, as aforesaid, within two months, the Archbishop of Canterbury should appoint one. In the year 1582, the school-house was erected on the north side of the churchyard, by a voluntary assessment upon the whole town. The estate belonging to this school, and by which it is supported, is comprised in one farm of about a hundred acres of land, situate a mile from the town, of the supposed annual

value of 180*l*. The master is required by the statutes, to receive boys resident within the town of Faversham, or within five miles thereof, for five years, provided they be between the ages of eight and fifteen. The education is classical, and instruction is given in other branches on very moderate terms. Proper advantage has seldom been taken of this valuable endowment: the number of boys has not generally exceeded ten, and at present is only eight. The Rev. John Birt, D.D., late head-master of the king's school at Canterbury, is the master, and also the vicar of the parish. His appointment is recent. He receives boarders at 60 guineas per annum, and at 100 guineas, according to circumstances.

FOLKESTONE.

A grammar-school was founded in this town by Sir Eliab Harvey, in 1674, for twenty children to be taught gratis. The endowment is a farm in the parish of Lympne, now let at 60*l*. per annum. Formerly, the master was paid 10*l*. for two years, and the whole yearly produce of the farm for the third year: his average salary was 25*l*. per annum. The overplus, after repairs, and other incidental expenses, was applied to the buying of boats for poor fishermen, freemen, or freemen's sons, inhabitants of Folkestone, or to apprenticing poor children. A school-house, and a house for the master, were built by a legacy of Dr. William Harvey. The mayor and jurats nominate the children, and, with other trustees, have the management of the school. For many years past no classical instruction has been given, nor has any master been appointed competent to it. Twenty boys are taught reading; writing, and arithmetic, free of expense. The present emoluments of the master are a house and garden, with a salary of 10*l*. for two years, and the whole proceeds of the estate every third year: the overplus, in the two years, after provision for repairs, is expended in the purchase of boats for poor fishermen, free of Folkestone. There is no special visitor.*

SANDWICH.

The origin of the grammar-school founded in this town is confirmatory of the opinion that schools were usually attached to religious foundations. On the suppression of the chantry of St. Thomas, one of the priests of which was bound to teach the youth of Sandwich to read, the inhabitants,

* The Corporation Report says: 'The mayor and jurats nominate the master, but he receives his appointment from the trustees of the school.'

severely feeling the loss of that provision for their benefit, entered into a subscription for the purpose of erecting a school-house, at the head of which was Roger Manwood, Recorder of Sandwich, who was afterwards Chief Baron of the Exchequer. Queen Elizabeth's license was obtained through the interest of Archbishop Parker, on a promise of a sufficient endowment for support of the building, and maintenance of the master. The license empowered Roger Manwood to erect a free-school in Sandwich, and created the mayor and jurats of Sandwich, and their successors, into a body corporate, as governors, with liberty to purchase estates, and to have a common seal. The Dean and Chapter of Canterbury assigned, at the yearly rent of twenty pence, to Roger Manwood, a piece of ground, called St. Thomas's House, near Canterbury Gate, with a piece of salts over against it, which, together with ninety acres of meadow, pasture, and wood, in St. Stephen's, or Hackington, near Canterbury, he enfeoffed for the maintenance of the school to the said mayor and jurats; and on the piece of ground, called St. Thomas's House, the school was built, and still continues. This enfeoffment is dated February 26, 1566.

Joan Trapps, of London, widow, by will, in 1568, gave to the rector and scholars of Lincoln College, Oxford, fifty-two acres of land at Whitstable, from the proceeds of which four scholars were to be maintained in that college, two to be chosen by the said rector and scholars from this school, and two by the governors; which lands were conveyed by her executors, Roger Manwood and Richard Heywood, they covenanting that they should yield to the said rector and scholars the yearly rent of 11*l.* 6*s.* 8*d.*, of which 10*l.* 3*s.* 4*d.* were to be paid to the scholars, and 13*s.* 4*d.* to the uses of the college. It was likewise agreed, that, after the death of the said Roger Manwood, upon every vacancy of the place of schoolmaster, the said rector and scholars should name to the governors two persons, fellows of the college, of whom they should choose one, in default whereof the Archbishop of Canterbury should nominate, the see being full and he being in the realm; or the see being void, or he being out of the realm, the dean for the time being should nominate. In 1570, Thomas Manwood, by will, gave such a portion of his estates as should amount to the clearly yearly sum of 10*l.* for the maintenance of an usher when need should require; and, in 1572, Roger Manwood, the surviving executor, granted premises in Sandwich of the same value. In 1581 Sir Roger Manwood above mentioned, then Chief Baron of the Exchequer, as surviving executor of the will of Joan Trapps, and in pur-

suance of it, conveyed to the master and fellows of Gonville and Caius College in Cambridge, a farm at Swalecliffe, together with fifty-seven acres of land, of the yearly value of 11*l.* 6*s.* 8*d.* for the same purposes, and under the same regulations as that theretofore conveyed to Lincoln College, Oxford. Sir Roger Manwood, during his life, received the rents of the estates he had enfeoffed, and paid the master's salary; after his decease, Sir Peter Manwood, his heir and executor, received the rents also, and paid the salary, till within a few years of his own death; Sir John Manwood, his son and heir, and others who claimed under him, received the rents, but made no payments; and consequently, in 1633 the governor sued out a commission of charitable uses. The award of the commissioners was in their favour, and empowered them to enter on and enjoy the lands according to the deed of feoffment. Exceptions against this award were put into the Court of Chancery, affirming that Sir Roger intended only 20*l.* a-year for the master, and that before making the enfeoffment to the mayor and jurats, he had made a lease of the lands mentioned therein for 500 years, reserving only the yearly rent of 20*l.* for the maintenance of the master, which lease afterwards, in 1574, was assigned back to Sir Roger, who disposed of all his leases in Kent to his heirs. Accordingly the award, so far as it concerned the stipend and arrears of the stipend, was confirmed, but was reversed in respect of the possession of the lands, and it was decided that Sir J. Manwood should hold the lands according to the terms of the lease. About one-half of this lease is expired.

Edmund Parboe, by will, in 1640, gave 10*l.* per annum out of premises in Sandwich, of which the sum of 4*l.* was to be in augmentation of the master's salary; 5*l.* in augmentation of the scholars' stipends at Lincoln College; and 1*l.* for wine for the governors at their ordinances. It does not appear that this bequest was ever applied to its uses. In 1685, the governors purchased a piece of land, with buildings, for the benefit of the master.

Sir Roger Manwood, in 1580, drew up rules, yet extant, for the government of the school; in which it is ordered, that the master shall be chosen by the governors, and that he shall, if it may be convenient, be master of arts,* and approved by the ordinary; and that he, and the usher, who shall be appointed by the master, and admitted by the governors, shall teach the grammar in the school. The children of the inhabitants of Sandwich were to be freely taught, and other scholars were to be received on such terms as should

* See the clause as to 'taking priesthoode,' *Journal*, No. XVIII., p. 260.

Education in Kent.

be appointed by the governors. ‘ And if there should not be so many grammar scholars as should furnish the school-house, there should be a person, who could write well, who should teach the scholars reading and writing in the school, in the time of there being no usher therein, to be placed in it by the mayor and jurats, and to be paid out of the revenues of the school 4*l.* yearly, and such gains as by his diligent teaching he could honestly get. The master not to take to board, diet, or lodge in his house, or rooms, more than twelve scholars, and the usher not above six, without leave being given by the Governors.’ The income now received by the master is about 45*l.* He resides in the house, which is commodious, and well adapted to its first intended purposes. There is no usher; no scholars have for many years been nominated either to Lincoln or Caius College. There have not been within memory more than half a dozen boys at the school from the town at any one time. The master has occasionally had an inconsiderable number of boarders. At present he has no boarders. According to Sir Roger’s regulations, the inhabitants of this town may avail themselves of the advantages of the school, by claiming for their children instruction in reading and writing.

WYE COLLEGE.

John Kempe, then Archbishop of York, and afterwards of Canterbury, and Cardinal of the Church of Rome, intending to found a college for the celebration of Divine Service, and for the education of youth, in this parish, in the tenth year of King Henry the Sixth, obtained the King’s licence; and afterwards, in pursuance of it, the archbishop by his instrument under his great seal, January 14, 1447, converted the parish church of Wye into a college, to consist of a fit number of chaplains and priests, to administer in it; one of whom he ordered to be called the master, or provost, of St. Gregory and St. Martin, to have the government of the others; and for their accommodation he caused a college to be built at the east-end of the parish church-yard, on his own ground, which he granted to them and their successors for ever. He afterwards gave them a set of statutes, for their better government, and good order, and endowed the college with competent estates and revenues in this and other parishes in Kent for their perpetual support and maintenance. The college remained in this condition until the reign of King Henry the Eighth, when the provost and fellows surrendered it, it being then (8 H. 36.) of the annual worth of 93*l.* 2*s.* 0½*d.* into the King’s hand. The site was but a few months in the possession of the

crown, it having been granted away with other premises, till by various alienations it became the property of Sir George Wheler, Knight, Prebendary of Durham, who by a codicil to his will, dated December 23, 1723, gave the site and buildings to the master of the grammar-school, and to the master and mistress of Lady Joanna Thornhill's Charity School, with other premises adjoining, of the annual value of 14*l.*, for keeping them in repair. The school was suppressed with the suppression of the college; but the king 'took some care for the revival of it,' charging Walter Bucler, to whom he had made grant of the property, with the annual payment of 13*l.* 6*s.* 8*d.*, for the support of a schoolmaster. The condition was neglected, and the grant was resumed in the reign of James the First. In the following reign, the premises were granted to Robert Maxwell, Esq., on condition of an annual payment to be made by him of 16*l.* for a schoolmaster. The premises are now the property of the Earl of Winchilsea, who is the patron of the school, and pays the stipend out of the tithes, all of which belong to him: the schoolmaster is the perpetual curate of the parish, and the college the house of residence. Sir George Wheler, who died in 1724, endowed by his will the school, with an exhibition of 10*l.* per annum; the exhibitioner to be chosen from Lady Joanna Thornhill's Charity School, to be educated here, and to be sent to Lincoln College, Oxford; to which an augmentation was made by his son, the Rev. Granville Wheler, of the further sum of 10*l.*, with a proviso, that if there should be no such boy as above described, it should be given to any boy of the parish of Wye, educated at this school. The difficulties attending this benefaction have caused it to lie dormant. This school has had a varying fortune. The house and situation are highly favourable; but whether it be from the scantiness of the master's stipend, or some other cause, the school has not had regular success. It is still used as a boarding-school, for classical and mathematical education, on moderate terms, and is resorted to by the sons of the upper classes of farmers and tradesmen*.

* No special visitor.

PRUSSIAN SCHOOLS.

THE Prussian schools are considered by many competent judges as forming the most complete system of public instruction now existing. They seem to deserve this praise partly on account of the superior care with which the teachers are instructed and trained to their future vocation, and perhaps still more on account of the manner in which they are arranged. Great care has been taken not only to give some instruction to every class of society, but great discrimination has been exercised in selecting some branches of instruction which have a more intimate reference to the future business of life for which the pupils are destined, and in combining them with such a portion of general information as appears most suitable to their future situation in society. Every part of the Prussian system is calculated to make the growing-up generation more useful members of society; and at the same time to afford them such instruction as must assist them greatly in their future occupations, and thus render them better able to support themselves. By pursuing with perseverance the plan of closely combining these two objects, many changes have been introduced into the arrangement of the schools, so that at the present moment they differ considerably from those of England, though, in most cases, some resemblance is still retained. By the following observations, the English reader may perhaps be assisted in forming an idea of the actual difference between the schools of Prussia and those of our own country.

The common division of education into academical and not academical still exists in the Prussian system, but all the institutions belonging to one or to the other of these two classes have been arranged on different principles and with different views.

Beginning with the universities, we find them very different from those of England. In Prussia they are not looked upon as institutions in which general instruction only is given, which may be afterwards applied by the student to whatever branch of business or knowledge he pleases. The principal object of the Prussian universities is to teach those practical sciences and to communicate that knowledge which are necessary for the due performance of such functions as require a long and diligent study in order to be successfully fulfilled. Such knowledge is necessary for the future clergyman, for judges and magistrates, and for physicians. Instruction, the most complete that is practicable, for such persons, is the principal object of the Prussian universities;

and each university may, with the greatest propriety, be considered as comprising a school of theology, of jurisprudence, and of medicine. The professors who teach the sciences and arts which belong to these three great divisions or faculties are even now considered as constituting the university; and the professors of the philosophical faculty are only looked upon as an appendage. By far the greater number of young men who attend the Prussian universities apply themselves almost exclusively to the study of theology, of the laws, or of practical medical science, and give only a very small portion of their time to the study of philosophy or the acquisition of general knowledge. Were a German scholar to give his opinion on our universities, he would say that they constitute only a philosophical faculty, with a small intermixture of theology; nor would he even in this point of view be willing to allow that, limited as the object of our institutions is, they are judiciously arranged, because he would perceive a great difference between our course and that adopted in his country, which he would consider better organized and more complete than ours.

In the two English universities, the Greek and Latin languages, with the mathematics, form the most important branches of instruction. We can hardly consider theology as forming a branch of study, even in Oxford, when we consider theology in that enlarged and comprehensive sense in which the term is understood in Germany. It is not so in Prussia. There it is required by law, and must be proved by a strict examination, at the time of admission to the university, that the student has previously obtained such a knowledge of the Latin language, as to be able to read the classical authors with ease, and to write Latin prose correctly; and further, that he has made such progress in Greek as to understand an easy author. For this reason it is not thought necessary to require the student to pursue these studies still further in the universities. The professors of the Greek and Latin language sometimes, indeed, explain a small portion of any of their favourite authors; but their proper business is to read lectures on the political institutions of the nations of antiquity, and on various branches of archæology. But even this forms a very inconsiderable part of what is taught by the professors of the philosophical faculty. The attention of the student who has leisure to follow their lectures is mainly directed to the investigation of nature, and if he wishes, he will not want, opportunities of entering profoundly upon the study of the mathematics, of natural philosophy, and chemistry. Others prefer the sciences which have for

their object the investigation of human nature, and accordingly study the metaphysical and moral sciences ; and others make it their object to investigate the relations existing in society, by applying themselves to obtain a knowledge of the rights of men and citizens, or the study of natural jurisprudence (*Naturrecht*) and political economy. Even the instruction in some branches of knowledge, which are attended by very few persons, is not neglected, as is proved by the appointment of professors for the Arabic, Sanscrit, Chinese, and other Eastern languages.

But the choice of all these branches of knowledge is left entirely to the student, and he is never asked whether he has studied such and such sciences, or has acquired such and such knowledge. It is otherwise with the study of theology, jurisprudence, and medicine. When a young man wishes to take orders, or to be admitted to the courts of law, to practise as a lawyer, or perform the functions of a magistrate, or to receive a licence for practising as a physician, he must submit to a severe examination, and prove by written testimonials of the faculty in which he has studied, and by his knowledge, that he has studied with care and attention all the branches which belong to these faculties.

In modern times, however, a considerable change in this respect has taken place, and even the philosophical faculty in the Prussian universities supplies society with two sets of men, who are so instructed that they can immediately enter on the business of life without any other preparation or study, namely, officers of internal administration and teachers. The amount and kind of knowledge required from each of these classes of students are fixed by law, and competent professors are appointed to instruct them. When these students leave the universities, and before they are admitted to exercise their profession, they are, like the members of other professions, subjected to an examination as to their competency. These two branches of knowledge should be erected into separate faculties ; a measure which probably will be soon effected.

In the Prussian universities then five classes of men are instructed in such a way as to be enabled to enter immediately on the duties of active life, namely clergymen, lawyers, physicians, officers of administration and teachers. It is almost needless to remark, after these observations, that these institutions differ almost entirely from our English universities.

The time of admission to the universities has been fixed by law at the completion of the eighteenth year, a measure which has been thought necessary because the students are

left entirely without control respecting the employment of their time, and nearly so with respect to their conduct. It was feared, that if young men were admitted at an earlier age they would abandon themselves to idleness and debauchery, and thus become unfit for the exercise of their future professions. Experience has shown the wisdom of this law. It is found, that young men in general, after the completion of their eighteenth year, have too much good sense to neglect altogether the duty of preparing themselves for the due performance of their profession, more especially whenever they have been so instructed as to be able to pursue their studies with a certain degree of ease. This previous instruction is given in the grammar-schools, on which we shall now make a few observations.

The Grammar-schools (*Gelehrte Schulen* or *Gymnasia*) of Prussia differ much less from our grammar-schools than the universities do from ours. Nevertheless the difference is still considerable. These schools are exclusively designed for preparing the pupils to attend with ease and profit the lectures delivered by the professors at the universities, and as the academical studies are very different, the preparatory instruction must be so likewise. Comparing them with our schools, we are inclined to think that the Prussian grammar-schools correspond partly to our universities and partly to our grammar-schools. We would compare them with our universities for the profound and often critical knowledge of the ancient languages which is acquired there, though we cannot say that the study of the mathematics is carried on to any thing like the extent that it is in our universities, and especially in Cambridge. Still the mathematics are taught more systematically and better than in our grammar-schools, in some of which they have not yet got a footing. On the other hand, many branches of knowledge are taught in these schools, which have not yet been introduced either into our universities or grammar-schools, at least not generally, nor as part of the regular course. Such are the principles of natural philosophy and chemistry, and a pretty extensive course of geography and general history. The portions of these sciences which are taught in the grammar-schools are selected with great care, and adapted to facilitate the student's pursuits in the same branches of knowledge when he goes to the universities. Nothing however is taught which has any reference to the future occupation of the students, with the exception of the Hebrew language, of which those who are designed to be clergymen are obliged to acquire the elements at school. The age of admission to these schools is

established by law at the completion of fourteen years*, and the boys remain there till they have completed their eighteenth year, when they are sent to the university. But before they leave the school they must submit to an examination, in which they must prove that they have acquired those branches of science and learning, which are required by law from those who go to the university.

The non-academical instruction comprehends likewise two divisions of schools, called middling or city schools and elementary schools.

The middling or city schools (*Mittel-schulen* or *Bürger-schulen*) are designed for the education of all those who, by their station in society, require to be better instructed than the lower classes, but who do not require an academical education in order to qualify them for their future occupations. Though this class does not comprehend the greatest number of the members of society, it includes the greatest variety of occupations, and accordingly the instruction in the schools designed for their use is more varied than in the schools for the other classes. In our country there are no public schools of this description, except a few, which have lately been erected in some manufacturing towns. Their want is commonly supplied by the private institutions called boarding or day schools. We think that the public schools of this description have many indisputable advantages over our institutions. Nearly all of these advantages are derived from the perpetuity of those schools; with us private schools are subject to continual changes depending on the pecuniary circumstances of those who have undertaken them, and on mere caprice in those who send their children there. We shall briefly enumerate the advantages which the Prussian middling schools derive from their perpetuity. First, the experience of a few years is commonly sufficient to give to the instruction in these schools a firm and solid basis, and to establish the best methods; and this can only be effected when the object in view is not changed, but pursued with unremitting attention and well directed energy. Secondly, it is much easier to ascertain what branches of general knowledge can be taught in these schools with the greatest possible advantage to the rising generation. Thirdly, and this is doubtless the most difficult point to be accomplished, it is only by long experience that we can determine what branches of instruction refer to the future business of the pupils, and are

* This applies only to the two upper classes of the gymnasia, which alone are considered as forming *Die Gelehrte Schule*.

best adapted to the circumstances of the inhabitants in the neighbourhood of the school.

This requires some explanation. The middling schools of Prussia differ from the elementary schools, as to the subjects taught, in two important points. The general instruction in the middling schools is much more comprehensive: it carries those branches which are taught in the elementary schools much higher, and embraces at the same time some subjects which are not taught in the elementary schools. But this does not constitute the whole difference. In the middling schools some branches of knowledge are taught which have a nearer reference to the future occupation of the pupils than the general instruction of the school; and these branches vary considerably in the different schools belonging to this class. It is obvious that many kinds of instruction which are very useful in a sea-port town would be thought quite useless by the inhabitants of a place two hundred miles from the coast. The population of a manufacturing district requires some branches of knowledge which are of no use to those who subsist by carrying on a commerce in the natural products of the country.

By adapting these schools to the different wants and wishes of each neighbourhood, a much greater variety has been introduced into them, than exists in the other divisions. A few of them are very large establishments, with six or seven teachers regularly employed in them, while in many others all branches of knowledge are taught by a single teacher. As the subjects of instruction, as well as the point to which they are carried, necessarily vary with the number of teachers, it is impossible to enumerate them with any degree of precision. It may, perhaps, be sufficient to indicate how far the larger establishments differ from the grammar-schools. In this respect we shall first observe, that the ancient languages are commonly excluded. Latin, however, is generally taught in the sea-ports and larger towns, but to a much less extent than in the grammar-schools. On the other hand, more time is employed in the acquisition of scientific knowledge, but this is taught in a more practical and less strictly-scientific manner. This is more especially the case with the parts of the mathematics which are applicable to mechanics, and with some portions of natural philosophy and chemistry. The instruction in geography and history is likewise more adapted to practical use. As to modern languages, French is taught generally, but English only in the schools of the sea-port towns.

As most of the branches of science which are taught in these schools are presented to the pupils in a form more adapted for immediate application, government has chosen some of them for the instruction of young men who are to be employed in inferior administrative duties. The public are informed by government in which of these schools clerks in the courts of justice, public surveyors, post-masters, custom-house officers, &c., may receive the instruction which will qualify them for the performance of their future duties. But this does not give any exclusive privilege to these schools, or to those educated at them. All must submit to an examination before they enter upon any office, and those who have received their instruction in other places are not prevented from entering into competition with those who have been educated in the schools above-mentioned.

The age of admission to these schools is not fixed by law. It is, however, the common opinion that before the completion of the twelfth year boys are not qualified for attending them with any advantage.

The elementary schools (*Elementar-schulen*), or the schools for the poorer classes, differ less from ours than the other schools already described.

This is at least true as far as regards the subjects of instruction, which are nearly the same in both. The difference rather consists in the use of more regular methods of teaching in the Prussian schools, and in the greater ability of the teachers, who have been trained to the business in the seminaries for educating schoolmasters. But the subjects of instruction have lately been enlarged in these schools, it being intended that boys who have staid in them to their twelfth year may be qualified to enter the middling schools, and to follow with advantage the instruction there given. Except with reference to this removal to the middling schools, the instruction in the elementary schools is quite general and has no reference whatever to any practical application. There are a few country schools which have been instituted for the purpose of facilitating the adoption of some changes in agriculture, which are considered advantageous; or for the introduction of a new branch of rural economy, as, for instance, the raising of the silk-worm.

It is, however, to be observed, that an elementary school is generally joined to every middling school, and a middling school to every grammar-school. In such cases both schools are placed under the direction and management of the same persons, from which circumstance there naturally results a

much closer connection between the subjects taught in both schools. For instance, the grammar-schools are divided into six classes, but it is only in the two superior classes that subjects are taught which refer exclusively to university studies, and these classes consequently are attended only by those pupils who are designed for an academical education. In the third class, pupils who are to go to the university, are mixed with others who are not to go there. Some branches of knowledge, deemed indispensable for the former, as for instance the elements of the Greek language, are considered as nearly useless for the latter, and therefore they are excused from instruction in such branches.

The union of such schools, as just explained, must be borne in mind in glancing at the following statistical tables, which exhibit a general outline of the present condition of the Prussian schools, and indicate the proportion existing between the whole population and the number of children who receive instruction in the public schools.

I.—Statistical Table of the Elementary Schools in 1832.

Provinces.	Departments.	No. of Schools.	No. of Teachers.	Number of Pupils.	
				Boys.	Girls.
1. Kingd. of Prussia	1. Königsberg .	1427	1615	57,735	53,214
2. Province of Posen	2. Gumbinnen .	1010	1129	41,462	39,000
2,025,925	3. Danzig . .	583	656	26,219	22,996
	4. Marienwerder	942	1030	33,387	28,627
2. Posen	5. Posen . .	775	798	32,185	28,703
1,056,278	6. Bromberg .	509	550	17,892	14,692
3. Brandenburg	7. Town of Berlin	117	398	7,490	5,641
1,579,939	8. Potsdam . .	1475	1705	56,501	54,713
	9. Frankfurt .	1305	1436	54,553	52,620
4. Pommern	10. Stettin . .	1063	1154	34,976	32,811
912,223	11. Coeslin . .	937	973	22,862	21,001
	12. Stralsund .	388	407	7,472	6,014
5. Silesia	13. Breslavia .	1399	1603	72,829	71,363
2,464,414	14. Oppeln . .	830	1098	59,082	56,486
	15. Liegnitz .	1311	1370	62,262	62,727
6. Saxony	16. Magdeburg .	1097	1387	50,248	49,071
1,449,587	17. Merseburg .	1129	1292	50,712	51,049
	18. Erfurt . .	484	564	23,865	22,796
7. Westphalia	19. Münster . .	476	539	30,177	29,585
1,261,996	20. Minden . .	538	609	35,217	34,201
	21. Arnsberg .	792	893	40,756	38,339
8. Rhenish Provinces	22. Colonia .	468	590	28,241	25,381
2,288,596	23. Düsseldorf .	710	888	47,199	41,677
	24. Coblenz . .	891	953	38,515	36,570
	25. Treves . .	688	776	31,709	30,596
	26. Aix-la-Chapelle	445	506	23,926	20,586
13,038,960		21,789	24,919	987,475	930,459

II.—Statistical Table of the Middling or Town Schools.

Departments.	Schools for Boys.			Schools for Girls.		
	No. of Schools.	No. of Teachers.	No. of Pupils.	No. of Schools.	No. of Teachers.	No. of Pupils.
1. Königsberg	35	109	2980	11	40	1632
2. Gumbinnen	18	44	1384	15	15	1003
3. Danzig	13	41	1425	3	16	675
4. Marienwerder . . .	13	44	1553	3	19	547
5. Posen	13	37	2133	7	20	1077
6. Bromberg	1	5	130	..	..	..
7. Town of Berlin . .	26	205	3077	54	403	4133
8. Potsdam	49	121	6236	35	86	4569
9. Frankfurt	32	88	4029	25	67	3325
10. Stettin	31	75	3139	23	53	2674
11. Coeslin	19	91	3592	18	91	3080
12. Stralsund	21	36	1232	16	27	764
13. Breslavia	36	122	5835	12	39	5138
14. Oppeln	3	13	319	3	11	190
15. Liegnitz	23	69	2475	19	57	1837
16. Magdeburg	22	90	4244	19	111	4042
17. Merseburg	40	112	7634	35	80	7406
18. Erfurt	11	42	2309	11	48	2544
19. Münster	8	9	397	1	6	20
20. Minden	5	13	424	5	12	476
21. Arnsberg	18	38	550	2	6	51
22. Colonia	4	19	209	1	2	13
23. Düsseldorf	15	39	774	16	56	13
24. Coblenz	13	35	311	1	10	29
25. Treves	8	23	285	3	5	171
26. Aix-la-Chapelle . .	4	12	213	4	16	268
	481	1532	56,889	342	1298	46,598

The whole Prussian monarchy is divided into eight provinces, of which six comprehend the eastern, and by far the larger portion of the State, and the two remaining form the western portion. The former are again divided into eighteen departments, and the latter into eight.

According to the foregoing statements, the number of children attending the elementary and town-schools, amounted, in 1832, to 2,021,421. The census of the same years states the number of children, who had not completed their fourteenth year, to have been 4,767,732. Now it has been ascertained, that the proportion between those children who have completed their seventh year, but not their fourteenth, and between those who have not yet arrived at the seventh year, is as three to four. According to this law, therefore, the number of children in the Prussian monarchy, between

sevent and fourteen years of age, amounted to 2,043,313, or only to 21,892 more than were instructed in the two above-mentioned classes of schools. To this sum is still to be added the number of children who attended the four inferior classes of the gymnasia, nearly all of whom were below their fourteenth year. They amounted to 18,552. Thus it appears, that the number of children attending the elementary and town-schools, fell short of the total number of those who had completed the seventh, and not the fourteenth year of age, by only 3340. We do not think that there is any country in the world in which the attempt to diffuse instruction among the people has been attended with results equal to those which have followed the measures of the Prussian government. An important fact is shown by these tables: the difference between the number of boys and girls instructed in the schools is very small. In England, as far as any returns show the numbers, the differences between the two sexes are much greater in most districts.

III.—*Statistical Table of the Gymnasia or Grammar Schools.*

Provinces.	No. of Schools.	No. of Teachers.	No. of Pupils.	No. of Pupils in the two Superior Classes.	No. of Pupils in the In- ferior Classes.
I. Prussia	15	158	3725	808	2893
II. Posen	3	42	892	106	822
III. Silesia	21	197	5103	1377	3709
IV. Pomerania . . .	6	69	1469	369	1149
V. Brandenburg . .	18	271	4327	845	3553
VI. Saxony	23	228	3828	1075	2774
VII. Westphalia . .	20	158	2170	517	1574
VIII. Rhenish Provinces	17	207	2971	836	2078
	123	1330	24,485	5933	18,552

The number of universities in the Prussian monarchy in which all the faculties are completely arranged, is six,—Berlin, Bonn, Breslau, Greifswald, Halle, and Königsberg. Besides these, there is a theological university for Catholic clergymen at Münster in Westphalia, to which is added a small philosophical faculty, and the Lyceum Hosianun at Braunsberg, in which a small number of Catholic clergymen receive their education. Further particulars appear in the following table.

IV.—*Statistical Table of the Prussian Universities.*

Places.	Professors and Teachers.				Number of Students.				Total No. of Stu- dents.
	Theol.	Jurisp.	Med.	Phil.	Theol.	Jurisp.	Med.	Phil.	
Berlin	12	12	38	60	569	585	320	258	1732
Bonn	13	9	14	33	331	231	129	106	797
Breslavia . . .	11	10	16	28	482	246	127	191	1046
Greifswald . . .	6	7	7	16	120	45	52	19	236
Halle	13	10	10	34	530	168	89	81	868
Königsberg . . .	7	10	10	26	184	108	58	162	452
Münster	8	..	..	10	213	..	..	79	292
Braunsberg . . .	5	..	..	..	29	..	..	..	29
	75	58	95	207	2458	1383	775	836	5452

Such an extensive system of instruction requires a considerable number of teachers, and it is to this point that the Prussian government has principally directed its efforts of late years. No particular provision is made for the instruction of academical teachers. It is reasonably supposed, that whenever a man has a decided inclination to some particular branch of knowledge, and is sure that by pursuing it with zeal he will obtain a competent income, he will not easily abandon such a pursuit: such persons are particularly qualified for being academical teachers. It has, therefore, been thought by government sufficient to assign a competent salary for academical teachers; and to encourage them still more, any person distinguished by his knowledge in some peculiar branch of learning or science is frequently called from one university to another. To induce such persons to submit to the inconveniencies of a removal, a considerable sum is added to the fixed salary of the place or professorship to which he is invited. This system is not confined to the Prussian universities, but is common all over Germany, and has been attended by very good effects. But the Prussian government has shown unremitting perseverance in preparing and training the future teachers of the schools, a considerable number of whom require an academical education. This is the case with nearly all those who teach in the grammar-schools, the number of whom amounts to 1330, as the tables show. Besides these, the greater number, perhaps two-thirds, of the teachers of the middling-schools also require that degree of knowledge which can hardly be acquired without going to a university. Accord-

ingly we find, that about 2330 teachers in the Prussian schools have had the advantages of academical instruction. Formerly these teachers were generally chosen from among those who had originally studied theology ; but it was soon shown by experience, that such persons were deficient in two essential points for performing their duty as teachers in schools. The most common case was, that some branches of knowledge had been too little cultivated by them, or not in such a way as was necessary for the purpose of communicating them to others with effect. Besides this, they knew little or nothing of the art of teaching. Not having been in the habit of teaching children, they were obliged to go on for some time, as it were, in the dark, and to find out their way by themselves, after committing numerous mistakes. In this way they might at last attain their object, but not without a considerable loss of time to themselves, and still more to the children intrusted to their care. To remedy this palpable deficiency, the Prussian government has instituted two sorts of seminaries, the *pædagogical* and the *philological* seminaries, both of which are united with the universities, and placed under the direction of the most able of the professors. To the *pædagogical* seminaries a school is attached, in which the future teacher has abundant opportunity of practising the art of teaching, and of observing in what manner it is practised by others. Passing successively through all the divisions of the school in this practical way, he soon becomes aware of the deficiency of his knowledge in some branches of science, and this conviction comes upon him at a time when he is most able to remedy the deficiency. As the university has the best teachers in every branch of knowledge, he has only to place himself under the professor of that science in which he wishes to improve his knowledge, and by study and perseverance he soon acquires the necessary proficiency. Every branch of knowledge may in this way be acquired without encountering any very serious obstacles, except the ancient languages. If the future teacher has not been instructed in them previously with proper care and attention, he finds it very difficult to obtain an exact acquaintance with them at the university. This circumstance, united with the opinion prevailing in Germany, that the ancient languages form the most solid basis of every sort of knowledge, and afford to the mind a more comprehensive sphere of exercise than any other subject, has given rise to the erection of the *philological* seminaries. In these institutions the classical Greek and Roman writers are explained by the most able scholars with critical acuteness, and in the

true spirit of antiquity ; and the effects of this instruction have already become abundantly conspicuous all over Germany, in the much more intimate knowledge which the pupils of the gymnasia have acquired of the ancient languages.

Of late years the government has taken equal pains in the instruction of those teachers, who do not require an academical education. The importance of this branch of administration may be conceived by considering the number of these teachers ; those employed in the elementary schools alone amount to nearly 25,000, and to these 500 more must be added, who teach in the inferior classes of the middling schools. For the instruction of this numerous body, the seminaries for teachers of the lower classes have been formed. The great success with which the efforts of the Prussian government have been crowned in this respect, has excited the attention of the whole civilized world. It is unnecessary to enter into any particulars respecting them, as it has been already done at some length in No. XII. of this Journal.

We have frequently mentioned the Prussian government, and attributed to it the great improvements which have lately taken place in the schools of that country. It will, therefore, not seem out of place to show how far the government of Prussia interferes directly with the instruction of the nation. It may be said, that no part of it is entirely exempt from the superintendence of the State, except that which is given by private tutors in families. But the government does not interfere directly with any part of it further than this ; it has entirely taken into its hands the instruction of teachers ; and it determines what kind of knowledge is to be taught in every class of schools, and to what extent.

The universities, as well as the seminaries, are placed under the exclusive and immediate direction of the Minister of Instruction. The universities are considered as schools, in which those only are instructed who are designed for ecclesiastical functions, for the profession of healing, or some branch of civil administration ; and, consequently, the government thinks itself entitled to determine what those persons must learn, and by whom and in what way they are to be taught. Were the grammar-schools attended by those only who wish to obtain an academical education, they would probably be arranged and entirely superintended by government ; but as a middling school is always united to these institutions, it has been thought advisable to entrust a portion of the superintendence to the local authorities and the heads of the communities in which the schools are situated.

As to the seminaries for teachers, if these institutions were left to the direction of the public at large, no intimate connexion between them could be effected, and the control would be either incomplete or capricious. Government has therefore wisely undertaken the entire direction and superintendence of these schools. The Minister of Instruction appoints the directors, as well as the other teachers of the seminaries, determines the kind and degree of knowledge which the future teachers must acquire, and supervises the whole arrangement of these institutions. He further fixes in what manner the examination of those teachers who are about to leave the institutions is to be conducted, and what kind of testimonials they must obtain. In short, government thinks it incumbent on itself to make the teacher ready for immediate employment, and to express in the testimonials what branches each teacher is qualified for. When this is done, government interferes no farther, but leaves it to the public to employ the teachers. The choice of the teachers is always left to a committee composed of a number of deputies of the community and of the local authorities, who are charged with the immediate superintendence of the schools, and who in some measure are responsible for the success of the instruction. It is reasonably supposed that such persons best know the condition and the wants of the schools; and that this circumstance, united with the duty of giving to government periodical reports on the effects of the instruction, renders them proper persons for choosing the best teachers. After having educated the teachers, government limits its interference with the schools, in which they are to teach, to a strict and vigilant superintendence.

But though the government does not interfere with the internal arrangement and conduct of the schools, it reserves to itself the exclusive power of determining the subjects which are to be taught in every description of schools; and as far as respects the middling schools, in every particular school. In this respect no change can be introduced without the express permission of government, that is the Minister of Instruction, and such permission can only be obtained by giving good reasons, and after a careful examination. It may be observed in conclusion, that by pursuing with perseverance a well-digested plan, the Prussian government has succeeded in forming a system, by which it is now enabled to increase in every description of schools the demand either for a larger quantity or a better quality of knowledge; and that this increase really takes place by a slow, but gradual progress.

ON THE DISCIPLINE OF LARGE BOARDING SCHOOLS.

THE question of discipline, or the management and government of boys in schools, is now beginning to receive that attention in England to which its importance entitles it. But, like many questions of a political and moral nature, it is generally encumbered with considerations foreign to the matter; the consequence of which is, that there is far from being that uniformity of opinion which would probably result from the question being clearly stated and fairly argued. Among our older writers, both Ascham and Locke have touched on this head. In Ascham's 'Schoolmaster' it forms only a subordinate part of his subject, and is not treated with sufficient method: still his remarks taken singly are good. Locke in his 'Essay on Education,' had mainly in view private and domestic education. The excellence of his remarks on this division of the subject makes us regret that so just a thinker did not handle the whole matter of education, both private and public. It is true that many of his remarks, particularly those on beating boys, apply generally, and may help any dispassionate inquirer in forming his judgment on this part of the question.

The practice of English schools in the government of boys, and particularly the practice of some of our public schools, has often been condemned in this Journal; sometimes only incidentally, on other occasions in a more formal and direct way. Such observations, it may be presumed, are not agreeable to those engaged in the direction of such schools; for though many masters may admit, to a certain extent, the truth of what is said, none like to have the establishments with which they are connected held up to public reprobation. There seems, however, to be no way of effecting a reform in such establishments, but by convincing people that they require amendment. No great improvement can be expected from those who have the management of these places of education, unless they see the necessity of making it; and the necessity for such change must have its origin in a conviction, generally diffused, of the importance of a school-reform. This Journal has attempted to show that our schools generally require great modifications in order to become good places of education; and that our endowed schools particularly require to be remodelled, and to be placed under the superintendence of the State. In treating subjects of this kind opinions must be founded on a collection and comparison of facts, some of which, supposed to be best suited to the purpose, are stated as

the grounds of coming to certain conclusions. There may be error in stating such facts, and, no doubt, mistakes are sometimes made; but no statements as to schools have been made in this *Journal* without previous inquiry; very few facts here stated have been called in question, and none have been proved to be erroneous without being afterwards corrected. If any person whose name is a sufficient guarantee that he deserves credit, will point out any mis-statements in this *Journal*, as to any place of education, his observations shall be inserted, and he shall have our thanks for his pains. As to the nature of the instruction and the discipline in schools, either public or private, those are better judges who are not engaged in the direction of such schools than those who are—provided they have had sufficient opportunities of knowing what schools are, and provided they have duly reflected on all the parts of this extensive and complicated subject.

In a recent article of this *Journal*, entitled ‘Fagging and Flogging at Winchester,’ some statements were made, and some arguments were urged, which produced a Letter to the Editor of this *Journal* (see No. XVIII.), signed ‘A Wykhamist.’ It may be expected that the Editor should now give his reasons for having sanctioned both direct and indirect attacks on the established modes of education, and on the discipline of the public schools of this country. As the opinions which he holds on the subject of education are nearly altogether inconsistent with those of his correspondent, it will be better to enter on the general subject without taking the paragraphs of the Letter in regular order and commenting on them. It is only necessary to premise that the following remarks refer almost entirely to large boarding-schools; whether they be endowed schools, or speculations of private individuals, is immaterial for our present purpose.

The term Education, which is generally used in the limited sense of instruction in certain branches of knowledge, comprehends, as we use it, all the means for forming the entire character of a man. In ordinary language, and in common practice, it is indeed restricted very nearly to the teaching of two or three languages, and a few branches of science; but even those teachers who confine their labours to this narrow and comparatively barren field, admit that education means something more than this: they admit this not by what they do, but by what they profess to do. Certain formal religious observances, the remnant of a more systematic and wholesome discipline, are now called ‘religious instruction;’ under which term is comprehended that part of school education, the professed object of which is to make youth acquainted with Chris-

tian duties, to train them to the practice of Christian duties •and generally to make religious and moral men. The formal part of this branch of instruction is doubtless in many schools carefully attended to; and the practical part also may, in some schools, be successfully inculcated. Indeed the terms of the charters and rules of all our endowed schools, and the printed prospectuses of our private boarding-schools, show that the founders, in the one instance, and the individual speculators in the other, contemplate something beyond the mere intellectual instruction, which is given in certain hours specially set apart for that purpose. It is not necessary to attempt to ascertain very precisely what is now meant when the directors of schools profess to give youth a religious and moral education; nor could many of them, if they were asked, tell us exactly what they mean. What some of them mean is simply this: they make the announcement of 'religious and moral education' in conformity to the opinions which they suppose to be prevalent among those who are likely to send their children. Others do really mean to say, that they wish, as far as they can, to train boys so that they shall be moral and religious men. They do not mean to say, that they have thought much about the best way of doing this, nor that they feel competent from reflection and experience to do what they have undertaken. Still the terms 'moral and religious education,' so familiar in every person's mouth at present, show sufficiently, in a general way, what kind of discipline these terms refer to. All persons engaged in education, in some form or other profess to train youth to be virtuous: it only remains to see how they go about it, and whether their methods require improvement.

Among those teachers and those writers on education who have directed their thoughts more particularly to the formation of character, we find, at the present day, two classes, both included in the comprehensive name of friends of education, who are now beginning to show themselves more clearly, and to separate into distinct groups. One party believe that the inculcation of religious dogmas is of primary importance—that this inculcation should be commenced at the earliest age—that without a knowledge of, and a belief in, these doctrines, no man can have safe principles for his conduct in life—and that any attempt at education which is not based on Christian doctrine, and solely guided by Christian rules, is useless and even dangerous. Of this party we may say that the success of their labours seldom equals their expectations, and, mainly as we think, owing to their having neglected those other means without which bare doctrinal instruction can produce no re-

sults. The other party believe that the inculcation of religious dogmas at a very early age is not a good way of forming character, and some of them think that it is a very bad way : they believe that a regular systematic training, framed in accordance with the principles of human nature, and superintended by a man whose example shall be a proper model for imitation, is the true way of forming a good character. They mainly trust to the repetition of a number of acts done in conformity to a general principle or truth for the formation of good habits ; and they would endeavour to check or counteract all bad tendencies, and the development of all erroneous notions, by a constant and vigilant superintendence. Few schools have yet been administered on these principles, either long enough, or systematically enough, to prove how much can be done in forming youth to good habits. Still, among those who have carefully reflected on early education, there is a large number who believe that religious and moral precepts have in themselves very little weight in early age, and who believe that no mere teaching of doctrines, either religious or moral, is of any efficacy at all compared with the durable impressions made by the constant repetition of certain acts under the superintendence of the teacher.

Many well-meaning persons in this country, who have a firm belief in the necessity of implanting religious truths early in the mind, are apt to overrate the efficacy of this instruction, and to expect results from it which experience does not confirm, and which a calm investigation would never lead us to expect. This is the case with most of the schools for the poor in this country, in which the formal part of religion is almost the only thing taught. It is the case also in many private schools, where religious observances are kept with a strictness that to many parents seems to be the surest guarantee for the formation of a religious character in their children. The compulsory attendance on the ceremonies of religion in our colleges, and in some of our endowed schools, is another instance of this kind. But in all these cases, it is well known, that neither an active religious belief, nor even a mere acquiescence in the truths of revealed religion, is secured in the majority of pupils by this formal teaching—much less are those habits acquired on which a man's right conduct depends. So much are all men governed by habits, and so little is the mass of mankind capable of reflection, that it is surprising that those who have shown so much zeal for the improvement of their fellow-creatures have not availed themselves of these truths. A large part of those who pass through life creditably and

usefully never reflect at all either on moral or religious truth : many very ignorant persons are totally incapable of it ; and yet they discharge the ordinary duties of life at least blamelessly, and if no very unfavourable influence turns them from the regular tenor of their course, they may pass through the world with a fair character, and on the whole do much more good than harm to society. Many owe this happiness solely to a calm temperament ; but a considerable number to the accident of having been early accustomed to regularity and labour, and having had the good fortune, in after-life, to be brought into contact with those only whose example and general mode of life were decent and orderly. This is not a very high kind of character, it may be said ; but it is a much better character than will be produced, in the majority of instances, by the mere teaching of any set of rules or doctrines, which are in themselves but feeble restraints on the desires and passions, and the feebler in proportion to the weakness of the understanding.

It appears then that in the schools for the poor, the practical influence of mere religious teaching has been exceedingly over-rated—a fact now admitted by many well-informed men, who are still zealous for the propagation of Christian truth. It appears also that, in the schools for the wealthier classes, a similar erroneous notion is firmly fixed. The influence of the religious instruction, or the bare religious ceremonial, on the conduct of the boys has been over-rated, and this mistake has contributed to a neglect of proper discipline. Not that this is the only cause why the discipline of all or nearly all our large schools is in its present deplorable state, for the total absence of a general superintending and corrective power (a power which can only be exercised by the State) has had a large share in producing this want of unity and sound principles of government in all our places of education ; but adherence to the mere forms of religious instruction and the concomitant neglect of true discipline have perhaps done more. As the origin of our schools is traced to the ancient religious establishments of the country, it seems likely (indeed, we may say, it is certain) that the teaching of Christian doctrine and strict exercise in Christian discipline were formerly combined. The discipline gradually fell into disuse ; but the teaching of the doctrines continued : and as this, too, has now become, in many schools, a mere matter of form, not considered near so important as the common lessons of the day, we cannot be surprised that it has nearly altogether lost its efficacy, and that ‘it is so difficult to make a large school a

place of Christian education*.' It is clear that this must be a natural consequence, as schools are now constituted.

If the doctrines of religion, as either specially taught at some schools to young boys, or presented to them merely in the way of formal observances, as is the case in some other schools, could make that impression which it is their professed object to make, there would be no difficulty in governing any number of boys. The magnitude of the truths impressed on them, and the solemn sanctions under which they are delivered, would secure obedience to the commands of a parent, and to those of a master who is chosen by the parent as his representative. But this is not the way in which the moral government of the world is carried on, either as regards men or boys. The acts of a large part of mankind depend in a very small degree on their belief either in moral or religious truths; and this is a fact in the constitution of things which we can neither help, nor safely neglect: it is our business to look to things as they are and as they must be, not to fashion a system of our own, and expect the constitution of things to conform to it. If men have not been trained to act habitually right, there is not much chance of their acting right when a powerful influence towards acting wrong is present to them. The knowledge of what is right must be first taught by seeing others act right, and by being practised to do the same. The whole of the reasons for acting in this or that way lie not within the compass of a child's understanding, hardly within that of a man, certainly not within the compass of the understandings of the majority of men. But as the understanding of a child is gradually formed, the reasons for acting in this or that way begin to show themselves to the mind, even if no very great pains are taken to explain them; and as the understanding grows stronger, the teacher can present by degrees to his pupil the reasons for particular lines of conduct, so far as the reasons can be given to a child. But till some habit is formed of acting in a given way, no reasons for conduct can be of any use. Hence, with young children, the will of those who are about them must be the sole rule of conduct, and it cannot be otherwise. It is fortunate for children when those who give them their first lessons set a good example; when they compel the children to that line of conduct which experience and reflection have proved to be best for children; when they teach them by actual experience, that they must submit to the physical and moral laws which govern the world, and that these laws cannot be violated with impunity; when they present to them as motives their approbation or disap-

* Letter of 'A Wykehamist,' *Journal*, No. XVIII. p. 291.

probation, which for children up to a certain age must be the sole test of the right or wrong of their actions. This education, if begun at home, would render the school education comparatively easy; but, unfortunately, youths are often sent to school in that state which renders their subsequent education frequently difficult, and sometimes impossible.

Still we may consider what school education should aim at, what it should attempt to do, if it cannot do it altogether; for the attempt itself to remove difficulties often opens to us unexpected means of accomplishing our purpose. It is the main business of a school education to form a youth for his future social duties as a citizen. To this end the body should be trained, by regulated exercise and wholesome diet, to discharge all the functions which are essential to health and to the development of the intellect; in which two conditions consist the elements of happiness, and without which happiness cannot be. The understanding is to be formed also by exercise, proportioned to its strength, and adapted to make it stronger: it should not be fatigued by more labour than it can bear, nor allowed to become torpid for want of due excitement and exercise. The passions must be taught to submit to the judgment, and the pupil must learn, that, if he wishes to govern others (and he will wish to govern others, in conformity to the very nature of his existence), his first achievement must be to govern himself. 'He that has not a mastery over his inclinations, he that knows not how to resist the importunity of present pleasure or pain for the sake of what reason tells him is fit to be done, wants the true principle of virtue and industry, and is in danger never to be good for anything. This temper, therefore, so contrary to unguided nature, is to be got betimes; and this habit, as the true foundation of future ability and happiness, is to be wrought into the mind as early as may be, even from the first dawns of knowledge or apprehension in children, and so to be confirmed in them by all the care and ways imaginable, by those who have the oversight of their education*.' In the power of self-control, then, consists the main difference between the virtuous and the vicious man: their desires must often be the same, but the one resists, and the other yields.

These are commonplace truths, it may be said, generally admitted, and generally acted upon. But some truths, whether commonplace or not, need to be continually repeated, to be presented under various aspects, to be enforced in various ways. No truths run so much risk of being little regarded as those which are universally admitted; though, for this very

* Locke on Education.

reason, that they are universally admitted, they are more important than any other truths, however great, which may be a matter of dispute. Thus, many religious truths, which are *matter of dispute among religious sects*, though of the highest importance in one point of view, are, in another point of view, of less importance than other truths, not religious, on which they are agreed. Truths on which all are agreed may influence the practice of all ; but truths in dispute, though efficacious in the conduct of those who hold them, lose half their force from the opposition of those who hold them not.

But it is not a fact that these fundamental truths in education are generally acted on. In many schools of high note, there is no object, real or professed, but to teach boys some Latin and Greek, with a few other branches of knowledge, very imperfectly ; and even in these schools, it is not unusual for the boys of promising ability to receive the chief attention in preference to those of less ability who require it more. The chief object is to train the cleverest boys to gain the dazzling honours of University prizes and distinctions, and to rest the reputation of the school on this narrow and worthless basis.

When a number of boys, of various ages, are placed under a master to be educated, we may consider them, for the time, as detached from their domestic relations, and as entering into a new social circle. We suppose the boys to board with a master, to live in his house as his family ; we suppose them, in fact, under those circumstances which are most favourable for the exercise of all the master's influence ; for it is obviously easier for a master to educate boys who live with him altogether, than to educate boys who only come to him during certain hours of the day for instruction. Parents transfer the education of their children to others whose profession it is to educate : parents themselves, who are not teachers, have generally other occupations, which take up all their time, and those who are rich are seldom able or willing to superintend their children's education. They accordingly send their children to boarding-schools ; and it is in these establishments that the influence of education is the greatest either for good or for harm.

Now, when a master undertakes to educate boys, he undertakes to govern and instruct a number of individuals, who have been brought up at home in a variety of ways, some with bad habits, some with good, but all with some peculiarities or propensities which require vigilant superintendence and frequent correction. Such an undertaking involves numerous difficulties, which can only be overcome by a man sincerely bent on the discharge of his duty, and well prepared for it by the possession of good sense, self-command, and an adequate amount of

experience and knowledge. Were a master at once to take under his charge a hundred boys, total strangers to him and to one another, the difficulty of the task would be much increased ; but it generally happens that he begins with a small number, if he forms a private school, and slowly increases it ; so that the accession of new comers is gradual, and he has time to study their characters without much impediment to his regular occupation. If he enters on the charge of an endowed school, he at once undertakes the management of a large number of boys, strangers to him, but not strangers to one another.

Most people who have been at any large school, especially a boarding-school, will recollect the feelings which they experienced on leaving home, and being thrown into a completely new society. Few events in life leave a stronger impression, and none are more important for the consequences. From the day that a youth enters this new circle, his thoughts and actions become unavoidably affected by the thoughts and actions of others ; it is, in fact, the beginning of his career as a member of society. He has exchanged the narrow circle of his family for a wider circle, which gradually embraces all the relations of social life. On entering the new society, he is like a stranger who enters a foreign country ; he cannot do as he pleases, or as he is accustomed to do ; but he must conform to that which he finds established. His words, his thoughts, his actions, in a few days, partake of the general tone, and the individual character is lost in that of the mass. And yet each individual, while he appears to be blended in the whole body, communicates to it something of his own ; and sometimes, when he is gifted with more than usual vigour of character, or with propensities more vicious than common, the influence of one youth on the society which he enters, is soon felt, but not always soon enough discovered*. The character of this new society which the boy enters, and the character of each boy that enters it, are two elements which require constant attention.

Boys, it is said, when they get together in numbers, will form a society of their own, and rules by which it is governed : they will fix a standard of morality, that is, some among them will become the creators of rules and customs, which the rest will follow from choice or compulsion. Such being admitted to be the case, must we leave them altogether to themselves ? or impose absolute rules for the whole regulation of their conduct towards the master and towards each other ? or must we allow

* This is a subject of great importance, as we know from the evidence of several medical men.

them to make regulations for their own internal government, under certain limitations? The first of the three plans is the case in some private schools, as we know by experience: schools in which the attention of the master does not go beyond the bare instruction of the boys during school-hours. For these schools there are no terms of reprobation sufficiently strong. A boy who is sent into a prison to mix with rogues and vagabonds of all ages does not come out of his prison more corrupt and impure than many weak and silly boys do from those boarding-schools, where the master's care is limited to the hours of school instruction. In such schools, if there is an usher whose business it is to keep the boys out of mischief during play hours, it often happens that this only aggravates the evil. A master, careless of his most important duties, transfers to an ignorant man, whose wages are less than those of a footman, and whom he treats with undisguised contempt, the care of his boys during those hours when they require more than usual superintendence. This wretched state of numerous private boarding-schools of an inferior class requires a separate consideration.

The relationship of a master or masters to pupils refers to three divisions of time, which occupy the twenty-four hours: the hours of instruction, the hours of relaxation and exercise, the hours of sleep. The master's duties extend over all these three divisions, and his superintendence is not more important in one than in any other. But these three divisions of time point also to divisions of a different kind—a division or classification of pupils mainly according to age. As far as we know, this classification seldom is made in England but for one purpose, for which it is obviously necessary, that of teaching, or that which has reference to the hours of instruction. Boys of pretty nearly the same age, and of acquirements not varying very greatly, form the respective classes. If education were organized in this country by reflecting heads, a classification of pupils would be made also with respect to the hours of exercise or recreation, and sleep. On this proper classification depends the whole good government of a school of large numbers: without it, there may be government of some description, such government as we see in many schools, but differing as much from the good government of a school as a country in a state of anarchy differs from a well ordered political community.

The difference in age which is found in the pupils of a large school is then the main principle of the classification. For the purposes of school instruction, the younger boys are formed into separate classes, are engaged on more elementary parts of

their studies, and require more help and more superintendence than the elder boys. The school instruction of the younger classes is the most important part of the whole school instruction; for if this is sound and rational, it renders what follows comparatively easy and pleasant; and while a boy is approaching the upper classes, and attaining to the strength and understanding of manhood, he is, at the same time, forming habits of application, and beginning to perceive that he must now depend on his own industry for his acquirements. Thus, with regard to school learning, as the boy advances in the school, he is more and more left to himself, which is not only necessary where there is a great number of boys, but also a proper thing when he has gone through such a training as qualifies him for this state of comparative liberty.

But are there not more weighty reasons for exercising a vigilant control over the younger boys, out of the hours of school instruction, than during them? During the school hours, their attention is occupied with their business: out of school hours, their attention is no longer thus engaged, and for this reason, they require more looking after. It is a fortunate thing, that in many of our large schools, a great variety of games and athletic exercises have been long established by custom: they are the great means of government out of school hours, in the absence of other government. A master should encourage all exercises of the kind, for the double purpose of strengthening the body, and giving occupation to a portion of the twenty-four hours, which, if not spent in this way, may probably be very ill disposed of. But the exercises in a school, and especially those of all the younger boys, should be regulated by a master who has some knowledge of the best kinds of exercises, who could show a greater variety than are known in our ordinary schools, and who could control and regulate them when either of an injurious character, or when carried to excess. Such a master we conceive to be an essential part of the establishment of a large school, in which the training of the body by suitable, and, we will add, systematic exercises, is as essential as the school learning, and, in our opinion, in which we may be singular, it is worth more. A variety of wholesome and proper exercises, taken within due limits, is absolutely necessary to strengthen the body and make it healthy; these exercises are of different kinds, suited to different ages, and in the case of all the younger boys, they cannot safely be carried on without a superintendent. Even the older boys will in some cases find it advantageous to take the advice of one who has made gymnastic his study. If boys of the same age, or nearly the same

age, are united in their games, there will be no great risk of the few, who may be larger and stronger than the rest, tyrannizing over the weaker: the presence of the master, who would always be somewhere near during the play hours, would be a sufficient check to any tendency of this kind, and his own example would be an example to all the rest. For we assume that the master of gymnastic would never use any kind of force to those who are either unable or unwilling to join in the games of their fellows; and that, in giving them any instruction in any new kind of game, he would not find it necessary to use either harsh words or blows. The whole time out of school hours should be as strictly regulated as the hours of school instruction; all games and exercises should be carried on freely, and without restraint—but within the limits and rules laid down by the exercise-master, whose authority, out of school hours, should be as large and complete as that of the head master in the school hours.

We must insist still more on the proper conduct of the games and exercises of a school, because they may be made, and ought to be made, the basis of the whole moral discipline. Though much neglected in many schools in England, the importance of this part of education is beginning to be felt; and we hope that some of our medical writers, who have paid attention to the subject, may soon give it that complete examination which none but a physician can do. An able writer has already pointed out the numerous and complicated evils which result from the want of exercise in female schools. Boys, fortunately, get a much larger amount of exercise; but it is often carried to excess, and for some constitutions is of too violent a nature, and also of a wrong description*. Boys require different kinds of exercise for the purpose of developing the body: and such exercises, if well directed, will correct many little defects and weaknesses to which some boys are subject. We are persuaded that boys at school often suffer permanently from the injudicious nature or excess of some of their amusements. Still the taste for these exercises exists in this country, and they are, even without direction, productive of great good, but might, we think, be conducted better by the whole school being placed, as to its exercises and games, under the superintendence of a master or officer; and indeed, as we have already remarked, it is more necessary, in our opinion, for this superintendence to be exercised out of the hours of instruction than during them. As the elder boys, with respect to school instruction, are gradually withdrawn

* See some judicious remarks on over-exercise in the work of Dr. Combe, reviewed in this Journal, No. XVI.

from the more particular superintendence of the masters, so we allow the older boys more freedom during the hours of relaxation, but not a total freedom from superintendence. If they have been well trained, they will have no wish to save themselves a little trouble by requiring the services of younger boys *during the play hours*, nor will the idea ever enter their heads that they may turn the young boys into ministers to their own amusement. If the younger boys are carefully brought up without submitting to the commands of their elders, they will have no inclination, when they grow older, to call for the services of their juniors.

The fault of most large schools of which we know anything, is not the severity of the discipline, but the want of discipline and order. It is not strict discipline in an army to allow drunkenness, or any other irregularity, to go unpunished, if not carried beyond a certain point, but when it goes beyond this point to visit it with a cruel punishment. Strict discipline does not allow the opportunity of committing the fault; and with this object its ordinary regulations are stricter than in an army, where faults are only punished when they attain a certain magnitude. In addition to a completely organized system of discipline out of school-hours, we would wish it to be well considered how far the services of servants should be allowed to boys. We would allow them no further than is absolutely necessary for attendance on their meals, and keeping the beds and the bed-rooms in order. Every boy should be taught to do many little offices for himself, not to expect them from a servant, much less from another boy, certainly not from a boy younger than himself, who rather requires assistance than is in a capacity to give it. Our correspondent (p. 290) says, 'that many a man who went from Winchester to serve in the Peninsula during the last war, must have found his school experience and habits no bad preparation, not only as to power of endurance, but in the helpfulness and independence gained during his training as a junior.' But many officers who never had the advantage of being *fagged* in youth behaved as well as any Winchester boys, of whom it is here said, that the school *fagging must* have been to them a useful preparation for a campaign. But it is quite as easy and quite as fair to say, that the *fagging must* have been a bad preparation. A regular systematic discipline, as strict as that of a good military academy, would have been a much better preparation for the campaigns of these Winchester boys. But how many delicate youths have suffered severely from *fagging* at public schools, have had their health injured, and their spirits broken? We should have a list of them, as well as of the heroes of the Peninsula.

If school discipline is intended to accomplish any good purpose, it must be framed by a competent head. It must proceed from the sovereign authority in the school, that is, the head master, or those who delegate their trust to the head master. But as the sovereign power in a state cannot be entirely exercised by the sovereign, but must be delegated to various subordinate authorities; so, in a school, authority must be delegated by the head master to those who are under him, and sufficient authority for all the purposes contemplated in the scheme of division of labour. The simple question, then, is, can any portion of this power be delegated* beneficially to the older boys, or to the higher classes in a school? for it is on this view of the nature of the power exercised by the higher over the lower boys, that what is called fagging is defended by 'A Wykehamist,' and maintained to be good. It is not true that this is the state of the case; but let us see what must be the consequences, if a certain power, it matters not how much, be delegated to the older boys, or more advanced boys in the school, over those who are younger or less advanced in their studies.

The power thus delegated may be either expressly delegated, or it may be tacitly delegated in accordance with certain positive rules existing in the school, which have grown up entirely among the boys, and have been transmitted from one generation to another. On the former supposition the master makes the law, and the older boys are merely the administrators of it, and, as such, ought to be, and perhaps may be, made responsible to the lawgiver: they become, in this case, for certain purposes, a kind of assistants to the master. On the latter supposition, a master, on being appointed to a school, adopts the custom which he finds existing, and thus gives it the force of a law. If a new master, on entering a school, tacitly allows any custom among the boys, be it good or bad, to exist without his express sanction, he admits the principle of allowing boys to make rules for their own conduct and government. And this is the general practice as to fagging. Of the remote origin of the custom we say nothing: it may have originally proceeded from a master, or it may have grown up among the boys; and the latter is probably the true account of the matter. Now, the object of a school is, that boys should receive all those regulations which are to be imperative rules of

* See Letter, Journal, No. XVIII., p. 286. The 'power of fagging' is there defined to be 'a power given by the supreme authorities of a school to the boys of the highest class, or classes, in it, to be exercised by them over the lower boys, for the sake of securing the advantages of regular government amongst the boys themselves, and avoiding the evils of anarchy—in other words, of the lawless tyranny of physical strength.'

conduct from the master, who is supposed to be wiser and better than they are, and it cannot be safely left to boys to make any one rule of any kind that shall be in force without receiving the express sanction of their master. The rule which boys would make among themselves, if they had full liberty to make rules, would be such as would be subversive of all order and decorum. It may be said that no rule established among the boys would be tacitly sanctioned by a judicious master, if it were a rule that had a decidedly bad tendency. But here we are on the question at issue: the master does tacitly assent to the authority of older over younger boys, he says the rule is a good one, and we say it is bad. But why allow a rule or custom to exist by tacit permission, about which there can be two contrary opinions? Let it be known generally that you say the rule is good and wholesome, and you will have established at least one good rule in doing so, that of allowing no customs to be in force in the school without your declared sanction. Customs, if such there be, that cannot receive your declared sanction, will thus want the authority that alone can give them weight, and will probably die away, as being clearly against what you declare to be proper. A master who is in favour of fagging, and expressly by words, or acts equivalent to words, gives it his full sanction, may be doing a very bad thing, but still he does it in a proper way. All that we can say of him is, that he has organized a bad scheme of discipline. A master who may be said to tolerate fagging, to wink at it, deserves severe censure.

But suppose the power to be expressly delegated, you cannot then well escape defining it. To expressly delegate to older boys a power over younger boys, and not say exactly what it is to be, and not to see that it is never exceeded, would be to delegate a power greater than that which you give to your masters. And yet you do not suppose that the older boys are so competent to govern younger boys, in any respect, as those who are expressly chosen to educate and instruct the younger boys.

And if you define the authority of the older over the younger boys, what shall it be? how much, and to what end? If it were to help, to instruct, to advise, to keep out of harm's way, the end would be good, and one could only complain that the means were not the best chosen. To do all these things is the business of teachers, who are, or ought to be, better qualified for it than boys. If not for these ends, for what ends will you delegate power to older over younger boys? to save the older boys some little trouble which they ought to have been taught not to regard, to make the younger supply the place of a ser-

vant, or to do any one act of any kind at the bidding of the older boys? But your older boy, if his native goodness of disposition is not already half spoiled by previous servitude, wants not the services of the younger: he can do all he wants for himself. What full-grown man, who deserves the name of gentleman, is always summoning a servant for every little office that he wants? The only relationship which should exist between the older and younger boys of a school should be exactly of the opposite kind to that which is inherent in a system of fagging. In the good example of the older boys, in their obedience to the rules of the school, in the friendly and confidential communications between these boys and their immediate instructors, in their willingness to assist a younger boy when occasion offers, the younger should see an example for their imitation, and an object of noble ambition. If the relationship is of a different kind, if it consists in a power given expressly or tacitly to the older to claim certain services from the younger, the result will be altogether different. It will satisfy nobody, whether he knows the actual state of a public school or not, to be told that this authorized and legalized power is the best security to the young against oppression, to be told that the power is not often abused, and that the young boy suffers less under the legalized system of fagging than if there were no legalized system. The facts are not so in all schools where there is fagging: they are not so at the present moment, and hundreds know this to be the case, and will assert it as strong as ever, whatever may be said on the other side. And who that knows what all boys must be, and what many masters are, places any confidence in this as a correct picture of the case? When power is exercised with no more responsibility than that which is stated by 'a Wykehamist,' it is certain that frequent and gross abuse of it must occur, just as it is certain that when a man is in the habit of inflicting blows on another, they will often be dealt out for imaginary faults, and be only the indication that the blow-giver is under the influence of passion, and not that the blow-receiver deserves punishment, or will be the better for it. We are told on good authority, and we believe it, that in one of our public schools at present (for our direct evidence goes no further than to one school as to this one point), not only is the junior subject to the commands of some one of the head boys, but that when not actually employed by his master, any senior boy who chooses may call upon him for a bit of extra work; and in that capacity the junior does pretty nearly as much work for others as for his own particular master; nor will his master save him from any thrashing or ill usage from a senior boy, when he (the junior)

is not employed in his particular master's service. In addition to this, there are certain hours in the day when certain fags are a kind of servants of all work for the general benefit of the school; and this remark specially applies to the hours when the boys on the foundation are shut up at night. At this time the fags receive the orders from their superiors who may want such things as pies, meat, porter, &c. The fags carry the numerous messages to the door which is locked, on the outside of which stands a servant, who receives all the orders and brings what is wanted from the cook-shop or other place. This service* may seem a small matter on the part of the juniors, and, as our correspondent must say, contributes to give them a certain helpfulness and independence; but when we consider the number and variety of the orders, the danger of confounding some or forgetting others, with the additional risk of the servant on the outside making some blunder, and that the fags are liable to be thrashed, and most certainly are thrashed, if all the good things, of which they have no chance of partaking, do not come duly to hand—it will appear that this is really a hard and odious servitude. But it would be endless to describe all the confusion, bullying, and tyranny, that are the necessary consequence of a large body of boys of various ages being all shut up in one room.

Still the great objection to the fagging system is not the services required of the juniors, nor the abuse of the power which the felders exercise: we are led to the consideration of the main objection, by what we have just stated; and the main objection is briefly this: The system brings the older and the junior boys too much in contact, considering the difference of age and of physical and intellectual development. This truth, which is of the highest importance, is admitted to a certain extent by the regulations of some private schools in England, but more so in some on the continent. We shall briefly explain this matter, though we are sorry that various considerations (some of them incident to the present state of society) prevent a complete exposition in this place.

The relationship between men and boys must not be confounded with that between older and younger boys. Men have learned to control their passions, to regard public opinion, and, if they cannot entirely govern their passions, they feel the necessity, at least, of concealing their actions, and of using caution in their expressions, not only before men, but more particularly before boys, who are quick to observe and ready to report. Boys do not observe the same decencies towards one another when they are thrown together in large numbers: their actions and their words are often without re-

serve : their society is not the world, but a small part of it : they know that they are not men, nor subject to the strict rules of man's society : a certain degree of licence will prevail among them in the best regulated schools. Now as to many matters, we can readily admit that if boys were all mixed together, and allowed to form their system of morality, some good principles might be established. Lying, for instance, might (except in certain cases, allowed by the positive morality of the school) be generally despised, a feeling of courage might be generally diffused, and other similar qualities, though in no case do we admit that these principles would be free from considerable alloy, if the boys were left entirely to themselves; and the reasons for these principles would not be the right ones. But as to other matters, we should have different principles established among the boys, and some of a pernicious character. The nature of the sexual relations is a subject that occupies the youthful mind from very early years, and is a never-failing topic of curiosity and inquiry. In schools this curiosity is encouraged and stimulated by the union of a number of boys; and especially, if those of a tender age are much with those who are older, are they exposed to this evil. The common results of this promiscuous intercourse, which are obscene language, coarse jests, and other things of the kind, are not the chief evil consequences : a prurient disposition is often formed at an early age, which becomes a source of great trouble to the person himself and to many others too. For this, among other reasons, the intercourse between the older and younger boys should be very much restricted during the play hours, but during the hours of sleep it should be absolutely prevented. Every school is a dangerous place in which a number of boys are put in the same room at night without a proper superintendent. But what must we say of those public schools where forty or fifty or more boys, of all ages, are shut up all night in a large room without any superintendence of any kind? Does it require a particular acquaintance with this or that school in order to enable us to say that the consequences must be pernicious, that the boundaries of decency are often violated, that the passions are stimulated by indecent stories and other means to a high degree, long before the physical development of the body would have made the sexual passion really felt? It is not necessary to know such places to say that such must be the consequences; but should it be said that a person is not qualified to write on such a subject without this peculiar information, then we add that we *know* that such are the consequences of this impure and disgraceful system.

We still hope that those who are better qualified to treat

this branch of the subject will not, from false delicacy, shrink from the task. Facts are abundantly known to some physicians who have had extensive opportunities of attending to certain mental disorders, the consequences of certain physical derangements; and no nobler object could be proposed to them than to show how those passions, which, when under due control, contribute so largely to human happiness, may not become, through the inattention and ignorance of the guardians of youth, the poison and the bane of their existence. The fundamental principle of correction, as to this matter, is the superintendence of the boys both by day and night, and the total separation of the younger from the elder in the sleeping-rooms. Many considerations besides these would be required to develop this matter fully; but in the active, systematic exercises of the gymnastic, and the strict, yet not severe, discipline of the school, the means for carrying out this principle would be found. A daily proper portion of bodily fatigue is the antidote to all wandering of the thoughts and dwelling on improper objects. In our schools many healthy boys take exercise enough of their own accord, and would often be better for taking less; but there are always some who are little inclined to indulge in athletic exercises, and these are they who specially require the encouragement and the direction of the master of gymnastic. A weakly and sickly frame is more liable to some of the evils at which we have hinted than a robust and muscular body. The value of gymnastic in such cases cannot be estimated too highly.

We have said that the fagging system brings the older and younger boys too much into contact; to which it may be objected, that the fagging system has a tendency to separate the older from the younger boys: and this objection is a truth, but let us see if it consists with what we have said. The fagging system does separate boys into distinct classes; it does separate older from younger boys. The older boys have a circle of enjoyments peculiarly their own: within this circle there is no sympathy of any kind between the senior and the junior boys. The junior boys are not qualified by age, or in any other way, to participate either in the proper amusements and pleasures of the elder boys, or in the improper amusements and pleasures of these boys. This, then, is a good reason why they should, to a great degree, be kept apart from them. But the junior boys are brought into contact with the senior boys, not as participators in their pleasures, but as ministers to their pleasures, their wants, and their caprices: they are brought into contact with them exactly under the circumstances which are most disadvantageous to both parties. The nature of this

relationship (suposing the senior to abuse his power and to set a bad example, which no person can deny does often occur) is not unlike the relationship between a dissolute man and his servant. The bad master and the man are, we all know, as much separated as any two beings can be in one point of view; while in another point of view they are brought into very close contact. There are no sympathies common to the two which tend to improve either: there are abundance of acts, of words, on the part of the master, witnessed by the servant, which tend directly to corrupt him. Were there no fagging in schools, and were the intercourse between boys, differing considerably in age, limited to that which it would be by the very nature of a good system, the intercourse between the older and younger boys would, we think, as a consequence, be of that kind which would exercise all their best sympathies; it would be sufficient for that purpose, and nothing more. In many of our schools where fagging exists, we have no doubt that many older boys do behave well to their fags, and do not take any improper advantage of their power: many masters also set a good example to their servants, use them well, and by their words and actions exercise a beneficial influence over them. An elder boy, under the fagging system, may in some instances do the same towards a junior; but while we admit the possibility of this, we beg to observe that the analogy between master and fag, and master and servant, which we have pointed out as existing in a certain case, is not one that must be insisted on to any great extent, either for or against the system of fagging. In the case which we have taken, it seems to us to hold, so far as the influence of bad example goes. As to the abuse of power, the servant can free himself from that, by taking his leave. In the case of the fag, the remedy is not so clear: and that the power of a senior over a junior is liable to abuse, and that it is not unfrequently abused, will, we think, be admitted even by the boys in our public schools. And how can this be otherwise, especially in those endowed schools where so many boys of different ages are so much thrown together, and shut up in the same room for so large a part of the twenty-four hours? In these rooms, fagging probably had its origin, and no place so well calculated for the production of this kind of government.

Let us now see on what the supposed necessity of the fagging system, as explained by our correspondent, rests.

Boys (see p. 287) in English boarding schools, 'for nearly nine months of the year, live with one another in a distinct society:' 'at their studies and at their amusements, by day and by night, they are members of one and the same society, in

closer local neighbourhood with one another than is the case with the ordinary society of grown men : ' for this their habitual living they require a government.' Doubtless they do require a government, and a good government : the question is, What shall it be ? ' It is idle,' says our correspondent, ' to say that masters form, or can form this government ; it is impossible to have a sufficient number of masters for the purpose ; for in order to obtain the advantages of home government, the boys should be as much divided as they are at their respective homes.' It certainly is idle to say that masters in this country do, as a general rule, form the government ; it is perhaps equally idle to say that they can form it, for they have generally neither the inclination nor the kind of knowledge, nor the habits that are necessary to enable them to form a good school government. But *why* cannot masters form this government ? The reasons are curious. The object of a school, it is assumed, is to obtain the advantages of home government ; to obtain this, boys should be divided as much as they are at their respective homes ; there should be no greater number of boys under one master than of brothers commonly living under one parent : nay, there should be fewer, inasmuch as there is wanting the bond of natural affection which so greatly facilitates domestic government, and gives it its peculiar virtue ; a father with thirty sons below the age of manhood and above childhood would find them difficult to govern ; but it is more difficult for a master to govern thirty boys who have no natural bond to attach them either to him or to one another ; and *hence*, for all these reasons, if you have a large boarding school, you cannot have it adequately governed without a system of fagging ; and hence it is concluded, that a government among the boys being necessary, the actual constitution of public schools places it in the best possible hands. This government of boys, it is further said, like every other government, requires to be watched, or it will surely be guilty of abuses.

All this rests on the assertion, that boys in boarding schools form a distinct society ; that by day and by night they are all in a close local neighbourhood to one another : and that this must be the case. On that circumstance in the constitution of nearly all large boarding schools, which most reflecting men believe to be the radical evil in such schools, is grounded the defence of all the evil consequences which flow from it. But boys must not be allowed to form a distinct society of their own : they are not sent to school to form a society for themselves ; they are sent to live in a society framed and governed by the intelligence and virtue of a man whose profession it is to train boys. Boys are sent to school, among other

purposes, to be instructed in the knowledge of social life, not a social life founded on their own notions, but one which shall be a fit introduction to the social state of manhood. It is next assumed that 'the advantage of home government is the object to be obtained at school;' but it cannot be obtained, and therefore the advantage of home government must be abandoned. There is then no reason, as far as we can see, for sending boys to boarding schools at all, for we do not choose to admit that the instruction of itself is an object worth obtaining at the cost of the 'advantage of the home government,' supposed by our correspondent to be the best government. But it is generally supposed—and though the supposition is not always a practical reality, it is on this supposition that boarding schools were founded, and to the existence of this supposition they owe their continuance—it is generally supposed, we say, that school government is better than home government, and for this among other reasons boys are sent to boarding schools. And this supposition appears to us, on the whole, to be founded in truth: first, many parents have not time to give to their children that attention which they require, many have little inclination, many more are totally unfit for governing their children well, from defect of temper, education, and numerous other causes;* they therefore send them to a man who makes it his profession to undertake to do what most parents cannot do. Secondly, it is known that boys must some time enter on life, and that it is better that this entry be preceded by a proper state of preparation than by none at all or by an incomplete preparation; and there is no preparation for boys so good as to grow up among those of the same age, but not solely of the same family, provided all the society thus arising is framed and governed by a man who has made the government of boys his study. Again, the absurdity of the proposition is pushed so far by our correspondent, that it is asserted, in order to obtain this supposed advantage of home government, that the number of boys under a master should be less than the number of brothers commonly living under one parent—that is, less than two. For the number of boys commonly living under one parent, to take the phrase in any sense that is consistent with a meaning, is not much above two upon the average of marriages in one of the most prolific countries in the world (Belgium); and if we take into the account the difference of age in boys of one family and the consequent departure of some of the boys from the pa-

* See Bishop Butler's Sermon, preached at Christ Church, London—'Consider next the manner, &c.' Various parts of this admirable discourse have a bearing on various parts of the question discussed in this article.

ternal roof, while the others are still young, it is clear that some of the male children may have all the advantage of this home government to themselves, and in many families must have it all to themselves; that is, a boy must be often brought up alone, which no person will call a good bringing up. Further, 'a father with thirty sons,' or, we will say, a much less number, 'all below the age of manhood and above childhood, would find it no easy task to govern them effectually.' We are not much inclined to undertake any discussion with those who first assume an impossible case, and then take the benefit of the argument in applying it to a possible case. A man with thirty children below the age of manhood must evidently have several wives, and it is probable that this circumstance would considerably increase the difficulty of governing his family, unless he adopted our principle of division and classification in his household; and even then he could not be always in all places at once. But suppose a man to have thirty children, and all his wives to be very obedient, and do their best to assist him in keeping good order, there is still a difference between him and the schoolmaster. The man with thirty children will have a profession or occupation of some kind; whatever it may be, we suppose his profession not to be that of training children: the schoolmaster's profession is to train children. Why cannot the schoolmaster do that which it is his profession to do, because the father cannot do that which it is not his profession to do? The father, if his only profession was to have thirty children, and to educate them, might, if he were a sensible man, do the thing very well. Much stress cannot be fairly laid on isolated cases within individual experience; but still, even in the present state of domestic discipline, is it a fact that large families are generally worse governed than small families? or is it a fact that a single child or a couple of children generally turn out better than a large family? We doubt if this can be affirmed. It is a common remark that brothers do not agree very well at home; and whether the fault be in their parents, or wherever it lies, as things are at present, it is a common and a just complaint. Would not any schoolmaster rather have thirty boys, all of different families to govern, than thirty brothers from one family? In addition to all this, many single masters do govern thirty boys, and govern them on the whole very well, without blows, without harsh treatment, and on the whole with successful results. There is a school near London, consisting of about one hundred and thirty boys, taken from the worst part of society, young thieves and vagabonds, who are well governed by one man with an assistant: no system of

fagging, legalized or winked at, exists here ; no blows are given ; but strict discipline is enforced, and kind words and behaviour are the reward of those who merit them. The appearance and manner of many of these boys are much superior to what we see in our inferior boarding schools. Cannot that be done in boarding schools, where the boys are generally of decent families, and pay a large sum for their education, which is done in a school where the boys have been corrupted before they come, and the means of which are limited to a few private subscriptions ? In this school for vagrants (at Hackney Wick, near London), the boys are employed in labour for the greater part of the day : the corresponding thing for a large school is systematic exercise.

Lastly, 'this government of the boys,' which is contended for, 'like every other government, requires to be watched, or it will surely be guilty of abuses.' This is a truth that we might guess without knowing practically what fagging is in schools ; but there is an exception to the remark,—the government of the master does not require to be watched by the master, as the government of the boys requires to be watched by the master, and in this consists its superiority. But is this government of the boys watched in the way that it ought to be in schools ? Is it likely that, where a master has a government of this description, established by long usage, and which saves him a great deal of labour out of school hours, he will take the trouble of superintending and watching this government, to do which effectually would be as much trouble as to govern on what we conceive to be right principles—a kind of government, we fully admit, that will impose more labour on the master out of school hours, than most masters at present undertake ? The explanation of the mode in which this government of the boys works, as given by a correspondent, (pp. 287, 288) is certainly a favourable view of it, and we admit fully that a system of fagging, as he there explains it, is a very different thing from a system of fagging as generally understood ; but unfortunately it is a very different thing from a system of fagging as it exists. We do not mean to question the accuracy of the statement there made, as applicable to the school (not there named) to which we suppose our correspondent to refer ; but we cannot consent to let this stand as a fair description of what is done in some other schools, in which the real working of the boys' government is very different from that described in p. 287, and which many who will read these remarks know to be characterized by those brutal features which a wise, a benevolent, a conscientious master certainly could

soften down, even without destroying the general character of the system itself.

We know that it will still be urged by many masters that it is impossible to govern a large number of boys in the way that we have recommended; but we are not aware that any sound objection can be made to it, except the number of masters that will be required. That this is not felt to be an insuperable difficulty, we infer from the mode in which our correspondent has attempted to prove that it is so; we presume that the arguments urged on this head are the best that the case admits, and we leave it to any person's calm consideration to give them all the weight that they deserve. But the principle of a proper classification of pupils will much diminish the difficulty, if any still remains; and after all, suppose two additional masters, beyond the number now employed, are required for every hundred boys in a large school, is this any real obstacle? Are not the terms of these schools high enough to allow the additional expense, or even a much larger one? When 80*l.*, 90*l.*, or 100*l.* are paid in schools containing 100 or 200 boys, surely a total income of 10,000 to 20,000*l.* per annum is enough to furnish every kind of instruction and superintendence that could be required. The 500 boys of Eton do not, on an average, pay less than 100 guineas per annum, each: surely an income of 50,000*l.* a-year is amply enough to provide a complete education for 500 boys; and the masters, after all, would find themselves carrying on a more lucrative trade than almost any other profession. If parents should begin to be convinced that something of the kind above suggested, ought to be attempted, it may still be urged by the masters that their labour will be prodigiously increased, even if their staff is enlarged, and that their emoluments, as boarding-house keepers, may be somewhat diminished. More masters will undoubtedly be wanted, and all the masters will have their hands full: perhaps also they may not make quite so much money as they now do. They will not only have to teach in the school, but to be much with their pupils out of school: the wall of separation between teacher and pupil must be broken down. The teacher must learn, that as he exercises a vocation of higher importance than any in the community, a vocation that all good men honour and respect—one that parents will learn to estimate rightly when they see its duties discharged fully,—so he must submit to much labour, and must devote his life to live with those whom he educates. If these conditions are too hard, let him abandon his occupation, or bring to it the zeal which ought to animate him who clothes himself with the respected title of the educator of youth, of those who in a few

years will form the men of the country, and the strength or the weakness of a nation. *

It is to the endowed schools of this country that we ought to look for those models of discipline that shall be an example to other schools; and yet, at the present day, while we find a few private schools conforming to the general system of these endowed schools (which they do merely in the character of preparatory schools for them, and under a certain influence called patronage), we see the most respectable private schools, and some of the new proprietary schools, adopting altogether a different system. This total want of unity, this anarchy in education, can only be remedied by the State placing all these establishments on a new footing, and providing them with a set of men well educated and trained to the profession of school-master. At present, it is a mere chance whether a man becomes a master of a school or something else: if he is a man of ability and of honest intentions, a long experience makes him a good master, so far as the system will allow: if he is not, the consequences are the total failure of the school for the life of one man, which may include the school-lives of several successive generations of boys. We are not yet sanguine enough to hope that the State will very soon undertake the greatest of all its moral obligations; nor do we wish to see a general school-reform attempted till the matter has undergone still further discussion. At present there are many new and imperfectly digested notions abroad, which require time, in order to fashion themselves into a shape adapted to practice. The present political condition of this country is very unfavourable to reform of our institutions of education; and the various causes of this unfavourable condition may be resolved into one single cause—too great liberty. The various members which compose the sovereign power have no unity of purpose, and this disunion in the sovereign power shows itself in all the various forms of delegated power, in all institutions of education of all kinds, in every religious sect, in every private establishment of education: The liberty which all these several members mean, when they talk of liberty, is, the liberty of doing as they please, that is, the liberty of frustrating the main

* Where the terms of a school are low and the numbers small, parents must be content with the kind of education which it is in the master's power to bestow. Where the terms are high, and the numbers are few or many, all may be done that is right to be done. All parents would do well to encourage the formation of large schools on reasonable terms: such schools are the schools for the middling and less wealthy classes of the country. By the union of a number of boys in such schools, they may obtain all the advantages of the best education at a cheap rate; and in no other way. Small, cheap schools cannot be good: large, cheap schools may be good. See some remarks which we formerly made on this subject, *Journal No. XV., 'Military and Naval Education.'*

ends of a political community. The universities claim the liberty of admitting into these places (so-called) of public instruction whom they please, and of shutting out whom they please; the established church wishes to have the liberty of educating all the poor in its own way; the trustees and masters of endowed schools claim the liberty of managing them as they think best; and the proprietors of private establishments would, taken in the mass, cry out against any wise measures which should compel them to educate themselves before they educate others*. When we look about us for the means of putting this chaos into order, of checking all these liberties which are only so many mutual aggressions, we find among the contending elements of disorder, no one which is yet powerful enough to control the rest. In the United States much ignorance and many absurd notions still prevail, and the liberty we have talked of has been abundantly active in producing mischief; but there is still this important contrast between them and us—the unity of sovereign power in the separate states for the purposes of the state government. The people only require to know that a thing is good, and the opinion *may* immediately be made practical. In Prussia, a wise government determines what is best for the people in matters of education, and compels them, for their own good, to a certain line of conduct. In England, half a dozen powers contend for the mastery, among which it would be difficult to say which of them, just at present, might most safely be entrusted with the power of reforming education. If there is any hope at all of beneficial change, it is in the Commons' House, operated upon by a profound conviction among those who are commonly called the middle classes of society. To produce this conviction should be the aim of every man who values the happiness, the peace, the safety of this country,—of every man who believes that the education of youth is the most important part and the basis of all civil polity.

A subordinate part of our subject remains to be briefly noticed; the mode in which a master can ensure obedience to his laws. With a proper classification of pupils, and with masters trained to their business, the maintenance of discipline in the school would be an easy consequence of a good system.

* By this we mean that no teacher should be allowed to teach, without having undergone a previous examination and having received a certificate of competency. On this question there is much difference of opinion even among those who are in favour of a school reform; and the question is not without its difficulties. Many of the objections which we have seen made to this proposition arise from certain confused notions of the nature of the sovereign power in a State, which we have no disposition to confute here; or indeed anywhere else.

In the present state of schools, it must be a more difficult task. A government which subsists by violence and physical force always causes more trouble to the governors than one in which the governors avail themselves of all the means of government which exist in the sympathies of our common nature.

It must be laid down as an unvarying rule, that a school not strictly under the rule of a master cannot be a good school; if the master cannot maintain his authority without blows, it is better that he should use blows than let his scholars be disobedient. It is also better that the corporal punishment, whatever it may be, should be fixed and certain, in case of disobedience, than that it should vary with the caprice of one or more masters. Corporal punishment, or the infliction of bodily pain, is not the instrument of government in English schools only; it is the great means of government, though in different degrees, in political communities all over the world, and its frequent and indiscriminate application to offences seems to be pretty nearly in proportion to the state of barbarism in each country. Thus, in Turkey, the stick is, and still more was, the great instrument by which society was kept in order, and conformably to this high state principle, the stick is the instrument with which a Mussulman schoolmaster rules the young disciples of Mohammed*. The adoption of so universal an instrument of rule must have its foundation in some principles of our nature as universal, and these principles are ignorance and laziness. The stick is an argument that is irresistible so long as it is wielded by a strong arm; it appeals to one feeling only, which all men have, and a very natural one too, a desire to avoid pain; it is encumbered with no complicated principles, which require reflection and analysis; it admits no motive short of it, and none beyond it; in fine, its arguments are irresistible when they can be enforced, and powerless when they cannot.

It is said, by a Wykehamist, that the idea of severe corporal punishment being ever now used in this country is a Blue Beard story, and that such assertions are ridiculous. In such matters it is always safer for a man to speak within the limits of his own knowledge, to say that in all the schools known to the objector there is no such thing, for other people have the same claim to credit when they assert the contrary. We say that corporal punishment in schools is often very severe; that blows, more than is good for the health, are often inflicted, and in large schools too, and we admit no claim of any one man to say that he knows the state of all the schools in England, when we know that his statements are not true of some schools known to us. But we contend that corporal

* See *Journal of Education*, No. XVIII., p. 365.

punishment, to be of any use, must sometimes be severe ; if not severe enough to frighten the boys into obedience, what is the use of it ? If it is a proper thing in any case for a master to inflict a blow upon a boy, it is clear that blows should vary in force and number, according to the nature of the offence ; and the offence being great, the blows ought to be many and hard. If this is not admitted, on what principle are blows to be inflicted ? Surely not according to the mere caprice of the master. In arguing this question of flogging, we are supposing a *system* in which blows are the governing principle, for we conceive it impossible for any man to defend a system of flogging in which there is no system at all. We have always considered the systematic flogging of public schools (bating the indecency * of it) to be better than the capricious punishment which many persons, and ourselves amongst the rest, have seen at a private school. A passionate man, and many schoolmasters are such, who has no regular system of flogging, will pinch ears, kick at the legs, pull the hair violently, and use very abusive terms ; such instances of ungoverned ill temper and brutal behaviour are not uncommon, and we speak within our own knowledge of having seen, not very long ago, such scenes, and of knowing that they are still common in schools, particularly in the north of England. An ignorant man, whom accident has made a schoolmaster, must govern by force, and the only bounds to his intemperate passions are actual fear of his

* Those who know nothing of our public schools, as they are termed, cannot well express their surprise when they hear for the first time the manner in which punishment is inflicted in these schools, and sometimes inflicted on boys of the age of seventeen or eighteen. We were not aware, till we set about making more particular inquiries, that the mode of inflicting this punishment varies considerably in our endowed schools ; nor did we know that it exists in some of very little note and reputation, and that in these schools, as we might expect, it appears in its worst form. In some schools, the punishment is always inflicted in public before the school, which appears to be the least objectionable plan. The boy, who is to be flogged, looses his breeches, and the master pulls out the shirt so as to expose the lower part of the back on which he operates with a birch rod. In some other schools it is generally done in private, and it is probably in that case more severe and less decent. But in such schools, it is sometimes done in public also, when the nature of the case seems to require it. A friend informs us, that during the time he was at the Charter House, some years ago, a boy in the sixth form and eighteen years of age was required to loose his breeches *in medio*, that is, before the whole school. But in some schools, the posteriors are completely exposed during the ceremony of whipping, and this before the eyes of all. It is difficult to say what custom will not reconcile us to : there can be no doubt that this indecent exposure, which would shock one not used to it, produces little or no effect where it prevails.

The consequence of disobedience to an order for loosing the breeches would be expulsion, and, under the circumstances, a proper consequence ; for we admit, as readily as any of our opponents may contend for it, the absolute necessity of the boys being obedient to the laws of the school. The only point of difference between us is, what the laws should be, and how they should be enforced.

pupils, before the stoutest and boldest of whom these unworthy instructors of youth have not unfrequently shrunk from their purpose.

Such a system of capricious punishment no one can defend, and we should not act an ingenuous part if we were to attempt to impute any approbation of such a system to our correspondent, though the vagueness of the manner in which he has defended the giving of blows, without clearly stating under what restrictions, lays him open to the charge of approving of blows any how inflicted, and for any kind of offence. But he who defends the infliction of blows, should state for what kind of offences he would give blows, and how they should be inflicted. We can hardly imagine any person maintaining that a boy should be punished because he cannot learn something which he has done his best to learn; or if he be really very stupid and dull, still if he has tried his best, no man, we think, would consider blows a proper punishment. Corporal punishment is probably reserved by the more reasonable defenders of it for the infraction of positive rules of the school (which rules may be good or bad), for obstinacy, lying, and other like offences. If it would cure, or tend to cure these evils, something might be said in favour of it. But our correspondent seems to think that the boy is the only person concerned in the business, whereas it takes two to make a flogging, a boy and a master; and our main objection to flogging is founded on certain considerations that primarily affect the master. Our objection is this: first, it is very difficult, particularly if the occasions for punishment arise often, for the master to inflict the punishment with coolness and solemnity, and, as a general rule, in ordinary schools, punishment follows the offence too soon to enable the master to do it judiciously. If it is inflicted with any passion whatever, it is very likely that blows will be inflicted beyond what is just, and beyond what the master himself intended; he will exhibit to his scholars an example of ungoverned temper, he who is to be their guide, their pattern, and their friend; he will run very great risk of forfeiting all their respect, unless he be a man of more than usual intellectual strength, in which case he may command some respect, but will secure no love. We are all along supposing that the scholar is conscious that he deserves some punishment, and that all the boys would admit the justice of the punishment; but what will be the case if he thinks he does not? Suppose his offence to be a violation of some petty rule—suppose the master to be influenced merely by bad-humour—is the boy in this case, as we are told, to submit quietly to what he feels to be unjust? He may submit, but in his moral

organization there is something implanted which resents this outrage, and we believe that this something is for good, not for harm. He feels contempt and indignation for the tyrant who abuses superior strength, and rooted hatred is his only feeling towards his teacher. Again, can a master, whose system is to govern by blows, expect the love and respect of those who are under him? If a boy finds that a blow is, in the master's mind, the extreme punishment, what value will he set on the master's approbation or disapprobation? What power has the master of influencing the conduct of his pupils, when the efficacy of the blows is exhausted? For boys, after a time, care not for blows; if blows are to do good, they must continually increase in severity, for boys, as is generally admitted, become hardened to them, and, in course of time, nothing but extremely severe punishment can be efficient, even in securing *temporary* obedience; and extreme punishment must be adopted by those who defend blows, if their system is to have the merit of consistency.

We stop to meet a possible objection that may be made, of this kind. Under your improved system, in which the disapprobation of the master is to work such miracles, is it not possible that the master's disapprobation may be expressed in cases where the boy thinks he does not deserve this disapprobation, which you substitute for other punishment? and if this is so, will not there be certain bad effects, similar to those which you attribute to the infliction of blows, or, at least some effects, which are positively bad and perhaps worse than those for a blow, which is a thing that many boys soon forget, while words often remain in the memory? Let us see how this matter stands. The expression of approbation or disapprobation implies reflection, caution, delay; the natural attendants of blows are passion and haste. There is the fore less chance of error in expressing disapprobation than in giving a blow. A blow also, as it has been well said by the Author of the Remarks on Flogging and Fagging in Winchester, is not a reason: it is not even a word; it is a blow and nothing more. Disapprobation is expressed in words—in words which are not words of passion, but words that contain reasons and require consideration; and reasons expressed are immediately subjected to the judgment of those who hear them; if they are good reasons, they compel conviction and acquiescence. If they are bad, perhaps the master will find out that they are insufficient, before he exposes himself by uttering them; and here again is delay, which is the thing we aim at producing, between the offence and the punishment. But suppose the boy does not admit the master's reasons; suppose all or nearly all the boys

sometimes do not admit the reasons for the expression of disapprobation to be adequate; and suppose the master's reasons are not adequate. But here again is a great difference between reasons and blows: the boys cannot deny that the master has acted with coolness, with deliberation, with a real intention to do his best; they cannot help approving of the mode in which he has expressed his disapprobation, even if he is mistaken. The master, on his part, will readily see how his opinion is received by the boys: if it is not received as he wishes, he must reflect on the matter and endeavour to find out where he is mistaken; and it is very likely that he will not fall into the same error again. A blow unjustly inflicted is a wrong done, for which no excuse can be given except that it was done in haste, which is no security against its repetition; whereas disapprobation, with reasons for it, even if the disapprobation is unmerited, contains in it something which is of the nature of security against a repetition. We have here supposed an extreme case. A well trained master, who has reflected on the motives by which both men and boys are influenced, will not be in much danger of falling into such mistakes as we have supposed. His disapprobation will be founded on good reasons, and will be the ruling motive for the boys avoiding to do wrong. In the other case blows are the ruling motive. Now here stand the two masters and let the boys choose between them: one holds in his hand the rod, and says if you do so and so, I will flog you; the other says, if you do so and so, I shall disapprove your conduct, and I shall show, by my behaviour, in private or public, or both, that I do not like what you do; I shall tell you why, and you will find that most of the boys and other people too will be of my mind. If you do as I wish, you shall receive my public approbation: this is what I offer to you as the opposite of my disapprobation. What has my friend there with the rod got to offer you as the opposite of flogging? When he approves of your conduct, he will not flog you.

Any man who has had any experience in managing boys or dealing with men, knows very well how many circumstances occur in this intercourse which tend to irritate and annoy; and this quite independent of positive disobedience on the part of boys, or bad intention on the part of men. The natural outlet for this irritation and annoyance is action of some kind; and the natural objects of this action are the causes of our irritation. Between men and men these feelings are checked by a knowledge that, if exercised unreasonably, they will call forth the feelings in others, which we name anger and resentment, without which corresponding feelings, the first would

run riot, and society could not exist. These antagonist principles are the elements of order in society; they produce mutual caution as to giving just cause of offence, lest anger and resentment should be excited. We are so constituted that we resist wrong, and endeavour to get reparation for injury; it is one object of society to help us in getting this reparation, and with this view the law fixes the mode in which reparation must be obtained.

As between boys and men, the case is different. Usage has given to men a power over boys which it has not given to men over men; and this power, as it is proportionally greater, and under comparatively little control, requires the greater caution in its exercise. But it is proposed to exercise this power occasionally, (what the occasions proposed are, we do not know—‘for faults of young boys’ is the vague term that is used, Letter, p. 284)—it is proposed to use the power occasionally in inflicting blows on boys, from whom the same consequences cannot be apprehended as from men, and therefore a great part of the wholesome restraint, above alluded to in the case of men and men, is here wanting. It is to be used by men who neither by education nor in any other way have any superiority over other men in controlling their passions; it is to be used by schoolmasters not trained to their business. It is certain then that it will often be used ill; it is a power that would be used ill by any man, whether schoolmaster or not. And the longer a man has been accustomed to inflict blows, the readier will he be to inflict them, and the more careless in discriminating the occasions for their application. A wise man is very cautious about inflicting a blow, especially on one from whom no resistance is apprehended; a wise master is cautious how he gives a blow to a slave who must submit; for experience tells us all, that our passions of all kinds grow stronger by indulgence, and that it is dangerous to exercise a power that may be used without fear of resistance. These arguments go to prove that it is very difficult indeed to inflict blows on boys, under any circumstances, without displaying passion, without exceeding the bounds of propriety which we ourselves acknowledge, and without forfeiting the respect of our pupils, and thus losing the strongest instrument of government in a school—the desire of the boys to obtain the approbation of the master. So great, we say, is this risk, that all men, particularly those of an irritable temperament, will probably lose much more authority by beating boys, even occasionally, than they would by abstaining from it altogether; and to those who are conscious of such infirmities of temper, we strongly recommend total absti-

nence from blows, which will infallibly set them on finding some substitute.

If, as is admitted (Letter, p. 284), 'the amount of corporal punishment may be reduced to something very inconsiderable,' it seems very difficult to find a reason why the little that remains need be kept. If it is good for any thing, why part with any of it? if it is not good, get rid of the remainder, for you will not surely say that having substituted 'the force of moral motives' for a large part of what was once flogging, you reserve the right of a bit of flogging to fall back upon when you are hard pressed for other means. In fact, we do not understand the way in which the flogging argument is put by our correspondent, though we have read it with much attention. Whether the application of a little of the reserved right would help us or not we will not venture to say.

The writer of the article on Winchester School asserts that 'corporal punishment is degrading:' the author of the Letter asserts this expression to originate in a proud notion of personal independence, which is neither reasonable nor Christian, but essentially barbarian, (Letter, p. 281.) It is not important to settle this point, which we leave as it stands. But it is important to see clearly what are the invariable principles of our nature, which remain the same whether names do so or not. Blows inflicted by a master, under the mere influence of passion, as they often are and must be, blows inflicted when the boy who receives them and his fellows too know they are not merited, even according to the blow-giving code, will be accompanied with a feeling of injury, and the boy will feel resentment.* Can any thing be more absurd than to say that this feeling is wrong (we do not say that our correspondent does say so), or that the boy should submit with all humility to the unjust correction of his superior in age? He feels resentment, and he cannot help feeling it: no teaching or preaching can eradicate the feeling of wrong: we presume, therefore, that the feeling is that kind of feeling which is necessary, and we therefore pronounce it good. From the moment that a blow is given unjustly to a boy, all the natural feeling of respect and regard for his master disappears, and it is impossible that any good can be done after. Whether what we have stated is an imaginary case, we appeal to some who may read this article. A prudent governor, either of boys or men, will be cautious never to put himself in a situation in

* See Bishop Butler's excellent discourse on Resentment.

which he runs the risk of losing the natural respect paid to superiors in age and station.

If space allowed we should insist still further on this topic, believing that as a general rule blows will be inflicted under the influence of passion, and that they do raise in the minds of boys a feeling of resentment, which are very sufficient reasons for not inflicting blows at all. As to a system of blows, which shall be the best possible system of blows, well regulated, strictly defined, enforced with all due solemnity, in number and degree varying with the offence, at certain intervals after all chance of passion in the master is over, and never felt by the boy to be undeserved—why all this supposes the efficacy and necessity of the blow to be entirely done away with, for it resolves itself into the ultimate principle of all school government and of all good society, the approbation and good opinion of those who are wiser and better than ourselves. When the matter is brought to this point—the offence committed, no anger or passion exhibited on the part of the master, but a firm resolution to punish, and no one to say that punishment is not deserved—when the matter is brought to this point, and the time for the punishment is come, will a blow add to the efficacy of the punishment? Suppose the punishment to be the disapprobation of the master, expressed either in private or public, as the case may be, accompanied with such personal restraint, or temporary separation from the other pupils as may be judged proper, will a blow add to the severity or efficacy of this punishment or take from it? We believe that the expressed disapprobation of the master, if the boys value his approbation or disapprobation, will inflict more pain, and pain of a kind to work good, than any blows in any way administered. If we have not said enough on the subject of beating, we refer our readers to Locke in his *Essay on Education*, in whose remarks they will find all, or nearly all, that need be said about it, which is here omitted, because it cannot be said better. Locke allows of beating, though unwillingly, in one case.

We have not touched on the effects which a practice of flogging, particularly under a passionate master, must have on the boys with respect to their intercourse with one another. A little reflection will show that the effects must be bad.

The author of the Letter (p. 282) has some remarks on the principle of pain, a word that we have just used, which seem to call for a few words. There is no disputing some of the positions laid down by him in Letter, p. 282, but how they all bear on the question before us, as explained by our correspond-

ent, we do not comprehend, nor can we understand the connexion of the several parts of the two paragraphs in which this matter is discussed. The following by itself is intelligible—‘To say that corporal punishment is an appeal to personal fear is a mere abuse of terms. In this sense all bodily pain or inconvenience is an appeal to personal fear; and a man should be ashamed to take any pains to avoid the tooth-ache or the gout. Pain is an evil; and the fear of pain, like all other natural feelings, is of a mixed character, sometimes useful and becoming, sometimes wrong and mischievous.’ And this—‘It is very true that the fear of punishment generally (for surely it makes no difference whether it be the fear of the personal pain of flogging, or of the personal inconvenience of what have been proposed as its substitutes, confinement and a reduced allowance of food) is not the highest motive of action, and therefore the course actually followed in education is most agreeable to nature and reason, that the fear of punishment should be appealed to less and less as the moral principle becomes stronger with advancing age.’

First we are told that to call ‘corporal punishment’ an ‘appeal to fear’ is an abuse of terms; then we are told that in this sense—that is, if corporal punishment is an appeal to fear—the tooth-ache or the gout is also an appeal to fear. So it would be if a schoolmaster could at his pleasure inflict a fit of tooth-ache, and many boys may congratulate themselves that they cannot, for assuredly tooth-aches would be more common than they are. An ‘appeal to fear’ may be a good or a bad motive, as our correspondent states. When ‘corporal punishment’ is called ‘an appeal to fear’ (a mode of expression which we by no means justify), it is implied, we presume, that the wrong motive is presented, the fear of the rod, instead of other motives which it is presumed would better produce the desired effect.

We are further told that it makes no difference whether a boy receives a blow from his master as a punishment for some offence, or some other kind of punishment such as is there mentioned. But here again we have the matter put into utter confusion, for it is the *kind* of punishment which is the very matter in question. We all admit that punishment of *some* kind is necessary for boys who do wrong, as well as for men; and there is no great difficulty in seeing in what the differences of punishments consist, which we think unnecessary to explain at length, as any body can find it out for himself by the following hints. The disapprobation of the master, the temporary loss of his usual kind regard, is a punishment dif-

ferent from confinement ; and confinement is different from a blow on the hand with a cane ; and a blow on the hand with a cane is different from a blow on the bare posteriors with a rod ; and a blow on the bare posteriors with a rod is different from thumb-screws or any instruments of torture ; and so on.

Finally, ' the fear of punishment should be appealed to less and less as the moral principle becomes stronger with advancing age.' ' Fear of punishment should be appealed to—' Is not this an abuse of terms ? we were told so just now. But this is a trifle. We are told impliedly that we must begin our education with one of the lower motives, which we now learn is the true character of the ' appeal to corporal punishment,' an opinion in which we entirely agree ; and we must appeal to it less and less as the boy grows older, because as he grows older his moral principle becomes stronger—becomes stronger by his education being first subjected to that influence which is called one of the lower motives of action. We do not profess to understand how the moral principle becomes stronger under this arrangement. Nor are we quite sure that we understand what is here meant by the moral principle. As boys grow older, their passions become stronger, and unless the power of self-control grows stronger at an equal rate, the whole boy is less adapted for right conduct than he was at an earlier age. He knows more as to what is best to be done, but he is subjected to more influences which tend to draw him from the right course. The power of conducting himself properly under these circumstances may be called the moral principle, and we presume this is what is intended. But this power does not come from increasing years, for with increasing years, when there is no right discipline, the moral principle, as thus understood, becomes weaker and weaker, as we all know. And this we believe to be the state of the case in many schools, not merely those called public schools. The passions increase with increasing years, but the power of self-control does not increase in the same rate, because there is no discipline specially directed to this object, as Locke suggests there should be.

It is not our business to examine all the points in the Letter of a correspondent, which would fill a book, and cannot enter into an article of limited extent in a small periodical. Nor do we profess to touch on all the arguments which are urged in reply to the author of the article on Winchester School.

Still it may be well to observe that the author of the Letter (p. 291) has mistaken the author of the remarks on Winchester School as to one important point. Both agree in stating that there is in England at present a great want of independent opinion in individuals; our correspondent justly remarks, 'There is a surrender of individual judgment and conscience to the tyranny of public opinion.' The author of the remarks on Winchester says, that there is an 'habitual self-humiliation which is practised every day in society where men without character or talent are receiving the homage of whole circles because they are in the possession of hereditary title or wealth.' The author of the remarks on Winchester by no means dissents from our correspondent's observation: he merely mentioned what is technically called tuft-hunting as a common vice of those brought up at public schools, of which institutions it was his business to treat. He did not mention the equally odious vice of popularity-hunting, because it belongs to a class different from that about which he was speaking. He says nothing, as our correspondent by implication says he does, 'of an excessive deference for legal authority,' which is a phrase without a meaning. All men of sense obey the law; and as to those who do not the law compels them.

WEST RIDING PROPRIETARY SCHOOL, WAKEFIELD,
YORKSHIRE.

WE conjecture that we are indebted to the kindness of a friend connected with this school for forwarding a copy of the *West Riding Herald*, which contains a very full report of the annual meeting (June 10,) of the friends of this institution. This report contains, among other things, the report of the principal, the Rev. G. A. Butterton, as to the internal proceedings of the school for the last half year. In the report of the principal is the following passage:—

'An article has lately appeared in a periodical entitled the 'Quarterly Journal of Education,' which, though it bestows considerable praise on the general management of this institution, yet condemns the intention of corporal punishment, even for immoral and flagrant offences, and sets forth as an example the course pursued at the Bristol College, where, says the reviewer, it has been found possible to dispense altogether with this species of punishment, and a system of discipline based upon an appeal to the reason and best feelings of the students, has raised up a tone of feeling and a degree of mutual courtesy such as do not exist in

any flogging establishment. Now I should be sorry to cast any imputation on an institution with which I have been myself closely connected, nor should I have alluded to this article, had it not been copied into a local paper, and so obtained circulation in this neighbourhood. But if the reviewer had examined into facts, he would, I think, have found the Bristol College dangerous to be followed too closely as a guide, though many of its regulations are undoubtedly excellent. In that institution the number of scholars has never, that I am aware, exceeded 120, and though no building has been erected, it has required more than one call on the shareholders to pay even its annual expenses; whereas we shall have saved in one year and a half 400*l.* above our current expenses, and that too although our annual charge is only 10*l.* and that of the Bristol College varies from 15*l.* to 21*l.* for each student. Undoubtedly the progress of the Bristol College has been in some degree obstructed by the strong party who were at first opposed to it, though their objections appeared afterwards to be removed; and my reason for mentioning these facts is, that before an institution is brought forward as so prominent an example to others, I think its own success ought to be placed beyond the reach of doubt or denial. But the fact is, that my experience whilst engaged in that institution, proved to my own mind, contrary to my previously formed opinions, that flogging was sometimes indispensable, for great dissatisfaction was in some instances caused there by being obliged to suspend or even dismiss boys from the college, owing to the inability of resorting to corporal punishment. I feel assured there are few parents who would not rather have every means tried than have their boys sent away from an establishment as totally incorrigible, and thus incur a stigma attaching to them through life. However, the most scrupulous advocate for mild discipline need be under no great alarm for the consequences of our severity, when informed, that during the whole year, out of 110 boys in the first half, and 170 in the second, four only have received that species of punishment for offences connected with the school, and in every instance it has had a most salutary effect.'

The article to which these remarks refer, is in the eighteenth number of this journal, entitled 'Grammar Schools.'

We return our best thanks to the editor of the paper, whose name we do not know, for inserting our remarks, which without his assistance would apparently not have reached the principal, or at least would not have received this public notice. We hope that the following remarks also may find a place in his paper, and that they may tend to the further discussion of the important question of discipline in large schools. Our remarks on the Wakefield School (see Journal XVIII.) were made with the best wishes for its success, as we believe that the school is calculated to do

much good, and that both managers and masters sincerely desire to make it a superior place of education. As we still entertain the same feeling, and at the same time think that the reverend principal has not duly reflected on the question of discipline, it may not be amiss, seeing that public attention has been drawn to the article in the journal, to make a few more remarks on the subject of flogging. In the preceding article we have gone into the matter at some length ; we here propose briefly to consider the principal's arguments.

It must first be observed that it is not quite accurate to say that the article bestowed 'considerable praise on the general management of the institution.' The writer knew nothing of the management of the institution then, and knows nothing of it now. He expressed an opinion that the principles on which it was proposed to conduct the institution, so far as they were explained in the printed account of the school, were sound.

It is stated in the article in the Journal that in the Bristol College, according to the reports of the Council, it had been found possible to dispense with corporal punishment, and that this had been attended with the effects already described in the extract. This fact the principal of the Wakefield School does not deny ; and, what is exceedingly unfair, he makes that the opinion of the reviewer which he knew very well to be the opinion of the Council and principal of the Bristol College. The mode in which he attempts to meet the statement is so confused and inconclusive that we should certainly not think it worth the trouble of refuting, if we did not know that many people take assumptions for demonstrations, and imagine that where there is a semblance of reasoning something has been proved.

In the Bristol College, it is said, the number of scholars has never exceeded 120. This has nothing to do with the statement made by the Council of the Bristol College, unless it is tacitly assumed, which we suspect to be the case, that 120 boys are not a number large enough to make the experiment on. But the number is large enough, even according to the principal's admission, for his flogging experiment was tried on 110 boys during one half-year. We therefore throw the 120 boys aside, as only encumbering the question. Next, he observes, the Bristol College has not incurred the expense of building, and yet more than one call has been made on the shareholders to meet the annual expenses ; and this notwithstanding the annual charge for a pupil is so much higher than

at the Wakefield School. But the higher price *may* be one reason why the Bristol College has not succeeded so well as the Wakefield School. It is then admitted that the progress of the Bristol College has been in *some* degree obstructed by the *strong* party at first opposed to it, though their objections *appeared* afterwards to be removed. If we are not misinformed, this strong party did obstruct it—not in some degree, but in a strong degree—probably in a degree which had the same ratio to some degree, that the apparent removal of their objections had to their real removal. It is then said, the *reason* for mentioning all these facts is, that an institution should not be quoted as an example to others till its success is placed beyond the reach of doubt or denial. But the Bristol College was quoted as an example of a place in which corporal punishment had been successfully dispensed with, which is a matter independent of its success in other respects, unless it is half assumed and the inference is tacitly intended to be drawn, that the want of occasional flogging has been the cause of its succeeding less than its friends wish. But while the principal of the Wakefield School assumes tacitly that the alleged want of success is connected with the want of flogging, he admits openly that the success of the Bristol College has been obstructed by a strong party ; and after all 120 pupils is not so very small a number, though it may be much smaller than its founders expected. From what follows we see still more clearly that the want of occasional flogging in the Bristol College is considered by Mr. Butterton as one cause of its alleged want of success ; not that even here is this asserted in so many words, but this appears to be the impression which he wishes to leave on the minds of the readers of this report. Flogging, he says, he is convinced, is indispensable, *because* some parents were much dissatisfied by their sons being suspended or even dismissed from the Bristol College, owing to the inability to resort to corporal punishment. Parents possibly might be dissatisfied with their sons being suspended or dismissed, but that does not prove that the suspension or dismissal was not proper ; the suspension or dismissal may have been the best possible step, in spite of the dissatisfaction of parents, whose individual wishes must never be consulted when they clash with a general rule of the school. Many parents, no doubt, would be glad to have their sons flogged with the hope of seeing them mended ; but these are generally parents who have either neglected their children when young, or from ignorance have treated them injudiciously. They then send them

to school to be mended, and want the master to flog them well; a job which the master, if he is a wise man, will transfer to the parent, and not flog one or two boys with the remote possibility of mending them, when he has, after due reflection, come to the conclusion that flogging is of little or no use to the boys flogged, and injurious both to himself and to the general discipline of his school. There is no doubt also, as the principal of the Wakefield School observes, that parents would rather have every means tried than see their sons sent away from an establishment. But flogging is not every means : it is one means, and there are many other means which may be tried by a master who will take the pains, before sending away a youth. It is true that in every large school it will be necessary to send away some boys occasionally, in order to save the rest from corruption, and this severe measure is quite as justifiable as the inflicting of punishment on men who transgress the laws of society. Still it is not absolutely necessary to send them away as incorrigible, nor to suppose that because they are sent away, a stigma must attach to them through life. If they are very bad boys, they must be sent away for the sake of the rest : they must not be spared that the rest may suffer. But they may be sent away privately, and placed under new circumstances where they may have a chance of reformation ; for it is absurd to suppose that even a very bad boy of fifteen who is (very properly) sent away from a school, must be branded with a stigma all through a life which may continue half a century afterwards. This notion of indelible stigmas is derived from our penal code, upheld by the positive morality of our society, which follows with unceasing persecution the man who has once erred, shuts him out of all hope of returning to society, and by telling him that repentance is unavailing and reformation useless, makes him an enemy instead of a friend to social order. Boys who are too bad to stay in schools (and there always are such) require a discipline analogous to that of a well-regulated prison. They are in fact culprits, who have violated the laws of the school, and in order to prevent their violating those laws of society which punish with unrelenting severity, they should be subjected to a suitable discipline in some school specially devoted to the purpose. Such a penitentiary for incorrigible school-boys unfortunately does not exist, nor is it the business of school-masters to provide one. The master does all that he can do when he gets rid of very bad boys. But the parent is deeply interested in looking out for such a place, and taking every

means to prevent an incorrigible son from coming to ruin, and he would be a wise man who should spend all the lad's fortune in a rational attempt at reclaiming him from his vicious habits. To suppose that a school flogging is of any use whatever in mending the very worst boys, is a notion so ridiculous, so totally contradicted by all experience, that one wonders to see the opinion expressed by any person accustomed to the management of youth. These boys, who are generally among the elder part of the boys, have mostly high animal spirits, strong passions, and great courage: they despise blows and the master who gives them.

We are not among the 'most scrupulous advocates of mild discipline,' who are afraid of severity: we are the advocates of a stricter discipline than we know to exist in any school, but of this strictness flogging forms no part. We believe that the worse the boy is, the less is the effect of flogging in the way of reformation. As to the four boys in the Wakefield School, on whom flogging has had a most salutary effect,—we have nothing to say. Our opinions remain as before.

The report gives a most favourable account of the success of the Wakefield School, which we have read with much pleasure. In the news at the end a short notice is given of the report, which we would willingly have lengthened had it not come to hand rather late.

Since writing the two preceding articles we met with the following paragraphs in Mr. Crawford's recent valuable report on the Penitentiaries of the United States. The remarks are applicable to the case of very bad boys at school. Mr. Crawford is speaking of the discipline in the Auburn Penitentiary in the State of New York, where the whip is used in correcting the prisoners, at the pleasure of the superintendents.—“In the permanent good effects,” says Mr. Crawford, “which this discipline is alleged to produce, I have no faith. It is true that the dominion of the lash produces instantaneous and unqualified submission, but this obedience is of a temporary nature. It imparts no valuable feeling, and presents no motive that is calculated to deter eventually from the commission of crime and amend the moral character. In the year 1828, the superintendent of this penitentiary published a work in which he gave a list of 160 convicts, four-fifths of whom were stated on their liberation to have become honest and respectable. On my visit to the penitentiary of Sing Sing I was informed that 30 of these persons were then in that pri-

son, and I was assured that an additional number of 20 had also been there since the appearance of that publication. In the repeated conversations which I have held in private with convicts who have been thus governed by the terror of the whip, I have invariably found that this treatment produced strong feelings of degradation and revenge. The lash is opposed to those moral and religious means which experience has proved most efficacious in the recovery of the human character." Mr. Crawford, when contrasting the discipline of the Eastern Penitentiary at Philadelphia,—where solitary confinement, under proper regulations, is used,—with the whip-system of Auburn—says: "In judging of the comparative merits of the two systems it will be seen that the discipline of Auburn is of a physical, that of Philadelphia of a moral, character. The whip inflicts immediate pain, but solitude inspires permanent terror. The former degrades while it humiliates; the latter subdues, but it does not debase. At Auburn the convict is uniformly treated with harshness, at Philadelphia with civility. The one contributes to harden, the other to soften the affections. Auburn stimulates vindictive feelings; Philadelphia induces habitual submission, &c."*

* See also p. 11, &c., for the very interesting account of the Eastern Penitentiary.

REVIEWS.

Sketch of the Progress of Physical Science. By Thomas Thomson, F.R.S., L. and E., &c., &c., Regius Professor of Chemistry in the University of Glasgow.

THE tract which we propose to review is an introductory discourse to the Glasgow edition of the American edition of the German *Conversations Lexicon*. With the work itself we have here nothing to do, and accordingly we have not looked into it. But the introductory discourse before us forming an article by itself, and bearing the name of a Regius Professor, deserves a little examination.

When we consider how many popular expositions are now making their appearance, it becomes a matter of some concern, as well as of some curiosity, to know whether the actual state of criticism is undergoing such changes as will render it available to correct the defects peculiar to an age of second-hand compilation as to parts, and 'commanding views' as to the whole. We regret much that we cannot be of opinion that criticism in general has a tendency to restrain the palpable and increasing neglect of accuracy which prevails; but we are determined, for our own share of the matter, to follow our author into the little things, the sum total of which constitutes the evidence of care or negligence, as the case may be. We are well aware that many a writer wishes to be judged by his work 'as a whole,' to use a common phrase, and detests minute criticism. But while we are willing to concede to many that they have just reasons for this hatred, we still hold with the mathematicians that the whole is made up of the sum of all its parts; if the parts be all erroneous, so is the whole; and if the parts be continually in error, whether of fact or reasoning, the whole is not good.

A general view of the progress of physical science, including that of pure mathematics, is no small task for an individual to undertake. That such a thing might be usefully executed, we know by experience. For instance, the preface of Bossut, to the mathematical part of the *Encyclopédie Méthodique*, though chargeable with many defects, is still valuable, as it bears the marks of a man who was abreast of his contemporaries in his knowledge of these matters, though frequently

disposed to make his own opinions on controvertible points a colouring matter to his statements. The things requisite to a successful performance of such a task are more easily described than found. Great knowledge of original sources of information is indispensable: for the object in view is akin to that proposed in the first triangulation of a country, when an accurate map is to be made: a few fundamental points are to be very accurately determined, which cannot be done second-hand from any history. Judgment is necessary, to know where to inculcate doubt, and where certainty, which quality cannot be acquired by copying a copy, or inferring from inferences, as must be done by one who is not actually acquainted with the works he speaks of. Exact choice and logical arrangement of words are pre-eminently required, because an author has not room enough in a general sketch to introduce a long argument, and make its obvious bearing explain, or if necessary, counteract, the mere etymological and isolated sense of a leading phrase. The defects of a bad compilation will be inaccuracy, false certainty, and what is just as bad, false uncertainty, together with inconclusive reasoning arising out of badness of style: and what we now proceed to prove is, that the present treatise has as fair a share of all three, as will enable us to show the danger of writing on subjects which have not been well considered. What we have said principally relates to defects which arise from not knowing original sources. But when an author attempts to continue the labours of his predecessors, and to bring history down to his own time, we may expect, if he be incompetent, to see him neglect that which is remarkable, and prefer that which his own limited knowledge embraces, to an extent which will enable us, in addition, to show the danger of writing on subjects which have not been considered at all.

Our author opens by stating that the southern portion of Asia was 'beyond dispute' the cradle of the human race: a pretty strong assertion, considering what an indefinite space he includes. Which is meant, Arabia, Persia, India, or the Birman Peninsula? But to make amends for this, we are told that the resemblance between the ancient Egyptians and the Chinese, is 'so very striking and so complete, that we cannot help' what—asserting it to be indisputable that they had a common origin?—no, 'suspecting, that they had a common origin.' Till now, we never heard of any but Dogberry who considered 'complete' evidence as nothing but a ground of suspicion. Again; 'if this were so, China, from its contiguity to India and Chaldea, and from the delicious nature of its climate, must have been first furnished with inhabitants,'

The author who makes China contiguous to Chaldæa, (or even to India in the sense of contiguity for the purpose of extensive emigration,) may well, for anything we see to the contrary, maintain a complete resemblance between the ancient Egyptians and the Chinese, especially considering how *very* extensive our acquaintance is with the manners and customs of both these nations. And as to the delicious climate of China, it is the same thing as to speak of the delicious climate of Europe, including in the delicious climate of Europe, the truly delicious island of Sicily and the plains of Andalusia, and the supposed delicious climate of Sweden and Northern Russia. We next find the account of Diogenes Laërtius* as to the Egyptian eclipses treated as a good authority, and mis-stated in one respect, inasmuch as the reader is left to infer that this account was given to *Alexander himself*, though Laërtius by no means expressly states as much, or even that the Egyptians themselves were authorities for the assertion. But in fairness to the author, we do not mean to imply that he consulted Laërtius. Our author next concludes from the *Chaldæan* Saros that the notion of the *Egyptians* upon the length of the solar year must have been a good one. This comes under our third head, namely, bad logic arising out of badness of style, for of course he must have meant to say that a good Chaldæan period proved good Chaldæan knowledge. But the *Saros* proves nothing but a tolerably good *ratio* of the lunar to the solar revolution, and has nothing to do with correct knowledge of the absolute periods measured in days. We give the passage:—

‘What knowledge the Chaldæans and Egyptians had made in astronomy, it is hard to say. They certainly had become acquainted with the planets’—what planets? Are Uranus and Vesta included? ‘But whether the Egyptians had discovered, as Macrobius assures us, that Mercury and Venus revolve round the sun, is not so clear. Their notion,’ that of the Egyptians of course, ‘respecting the mean length of the solar year, and the mean length of a lunation, must have been near approximations to the truth. This is evident from the famous Chaldæan period called the Saros.’

Our author makes great use of the *safety-valve*, and frequently in the wrong place. An author’s safety-valve is a modifying expression, such as ‘perhaps,’ ‘in some measure,’ &c., inserted where he is not very sure of his ground, that his errors may appear rather over or under-statements, than positive mis-statements. If we consider how much precise information could be given in few words on all the subjects con-

* *Procem.* II.

tained in the following paragraph, by any one who was well acquainted with the knowledge of the Greeks, we must pronounce it to be a master-piece of *valvular* dexterity.

‘ If we except the discoveries of Archimedes in statics and hydrostatics, *hardly* any other branch of physical science was *much* cultivated by the ancients. They had made, indeed, *considerable* progress in the knowledge of acoustics, so far as music is concerned. In optics, they can *scarcely* be said to have made any progress of *consequence*; and in astronomy very little till the time of Hipparchus, who *may* be considered as, *in some measure*, the founder of that sublime science.’

We next come to the conclusion that because the Chaldeans constructed sun-dials, they knew *gnomonics*, which, if the geometrical science be meant, is by no means a proper conclusion; and which, if a mere synonym for making sun-dials be intended, contains no information. The account of Euclid which follows is short, sensible, and correct,—except always where it is said that it is ‘the first four books of Euclid chiefly which are studied by modern geometricians.’ Those who read Euclid at all, even in the higher classes of schools, surely study the fifth and sixth books. But generally speaking, the author here knew what he was writing about. Passing to Apollonius of Perga, we find a mistake of a hundred years in his birth. We next see some of those general assertions which always remind us of the phrases by which, in an act of Parliament, lawyers try to include all cases that can happen. ‘The writings of Apollonius were numerous and profound: but it is upon his treatise on the conic sections that his fame as a mathematician chiefly depends.’ This is cautious and safe, but it would have been as easy, supposing it known, to say that with the exception of one little treatise, recovered from the Arabic, the *only* work of Apollonius is that on Conic Sections; that many other works are mentioned, but what they were, profound or not, is not known, except from the titles which have been preserved, with a sketch of the contents, by Pappus. Again, speaking of the Conic Sections, ‘in the fifth book he treats of the greatest and smallest lines, &c., &c., and many other intricate questions which required the greatest sagacity, and the most unremitting attention to investigate.’ Had the author ended with the words which we have placed in italics, he would still have been wrong, for it so happens that every proposition in that fifth book directly belongs to his previous words, ‘greatest and smallest lines, &c.,’ and no other subject is treated. How are we to account for this singular faculty of passing positive opinions upon purely ideal propositions, it being considered that we do not know whether

Apollonius had great facility or not, even as to the propositions which *do* exist? We think we can explain this, and we are strongly reminded of the case of the three black crows. We have here an instance how, from compilation to compilation, assertions are magnified. It is minute criticism which prevents every black thing from growing in time to be a flock of crows, by seizing the birds before they are fully hatched and able to fly. On searching a little, we found our author's source of information in Montucla, and from the reference of that admirable writer, we trace the assertion about the numerous and profound works as follows:—

Pappus (book 7, preface, Latin edition of Commandine,) enumerates the various works, 'qui ad resolutum locum pertinent,' that is, we may say, which treat of the geometrical analysis of the time, which was entirely confined to the resolution of *loci*, or problems directly reducible to it. Many of the works cited by Pappus are by Apollonius, and the Conic Sections are mentioned last of all, as a sort of point to which the student is to look forward. 'Itaque omnes libri sunt numero triginta et unus, quorum periochas vel argumenta usque ad Apollonii conica tibi exposuimus ad contemplationem.' Montucla has fairly paraphrased the sense of the preceding in the following words: (vol. i. pp. 245, 6.) 'Apollonius fut un des écrivains les plus féconds et les plus profonds qu'aient eu les mathématiques. Ses ouvrages seuls composaient autrefois une partie considérable de ceux que les anciens regardaient comme la source de l'esprit géométrique; son traité des coniques est néanmoins le plus remarquable, et celui qui a le plus contribué à sa célébrité,' (meaning of course among the ancients, as the context shows, though an ambiguity, but one incidental to the isolated clause only, would have been avoided if *parmi ses contemporains*, or some such phrase had been added.) Next comes Dr. Thomson to paraphrase the paraphrase, which he does as follows:—'The writings of Apollonius were numerous and profound: but it is upon his Treatise on the Conic Sections, in eight books, that his fame as a mathematician chiefly depends.' We see here the first clause joined to the last, with the omission of the middle clause, which would prevent the last from being ambiguous, so that the ambiguity not only exists, but is reflected back upon the first, leaving the reader to the final impression that Apollonius left many and profound works. One compiler further on, and Apollonius would be expressly declared to have written many remaining works; one more still, and the titles of Pappus would be asserted to be those of works still existing; yet one more, and the *restituta* of various

moderns would have been declared to be genuine Greek. With regard to the *many other intricate questions*, we think it arises as follows :—

MONTUCLA.

‘ Dans le cinquième, Apollonius examine particulièrement quelles sont les plus grandes et les moindres lignes qu’on puisse tirer de chaque point donné à leur circonférence.’ Montucla then proceeds to describe how the above-mentioned investigations are equivalent to those of the moderns on ‘*développées*,’ and ‘centres d’osculation.’

Now we conceive that our author, casting his eye over Montucla’s next sentence, saw something about *développées*, and *centres d’osculation*, and concluded, (properly enough, perhaps,) that these were some distinct things which he might as well let alone ; and that the ending he adopted would be a decent ‘&c.’ We are confirmed in this by observing, that as soon as Montucla is fairly out of those slippery *développées*, Dr. Thomson catches him up again, (with a variation of some importance,) as follows :—

MONTUCLA.

Le septième livre, (car je passe le sixième qui ne contient pas des choses fort difficiles, et qui traite des sections coniques semblables) le septième livre, dis-je, présente divers propriétés remarquables de ces courbes ; telles sont celles-ci . . . Je pourrais accumuler un grand nombre d’autres propositions semblables, dont *plusieurs* sont fort *remarquables* et servent de fondemens, &c., &c. . . . Ces questions étaient traités dans le huitième livre qui ne nous est pas parvenu, &c., &c.

DR. THOMSON.

In the fifth book he treats of the greatest and smallest lines which can be drawn *from each point of their circumference*, and many other intricate questions, which required, ‘&c., &c.’ Dr. Thomson has taken rather more than periphrastic license in his translation of the words in italics.

DR. THOMSON.

The sixth book is not very *important*, nor difficult, but the seventh contains *many very important* problems, and points out the singular analogy that exists between the properties of the various conic sections. The eighth book has not come down to us.

Now, in the name of truth, why should Dr. Thomson, or any other person who has not read Apollonius, frame a description of that work by engrafting his own ideas of what it may be, as a supplément to those of Montucla upon what it is ? The latter never calls the sixth book unimportant, nor is it so in fact. The seventh book is much more correctly

described by Montucla's 'several remarkable' propositions than by Dr. Thomson's 'many very important' ones. But all this, it may be said, refers to very little points. What matter a few propositions, more or less, in a book of the Conics of Apollonius? To this we reply that we think the attempt to particularise the various books altogether injudicious and misplaced, in a short treatise on the rise and progress of physical science; and very much like making three leaves off a tree represent a landscape. But if it be inserted there at all, why should it not be correctly inserted? How far it is worth while to tell a particular story, is one question; but we hold and maintain that there ought to be no question whatever as to this, that it is most essential that what is told should be told correctly. There seems to be a general impression that inaccuracy is venial, as long as it does not take an improbable form. It may not be said that a man flew up to the moon; but it is perfectly tolerable that he should be stated as having gone east, when in fact he went west. That is, let error have the every-day character of truth, and it is then fit to publish. Now, for our own parts, if we must have a union of fiction and history, which conveys wrong ideas, we had rather it were made a little interesting, so as to be a good historical fiction, not a dry fictitious history. We would invent anachronisms and set authorities at defiance to some purpose, and describe how Apollonius was so much taken up with the 'intricate questions' in the fifth book, which required such 'unremitting attention,' that he would not come to tea when his wife called him—and how she hid his papers next day—and how he raised such a Greek storm about her ears when he found it out, that all the ladies in Alexandria cried shame, and blessed Isis that their husbands were not mathematicians, &c., &c. In fact, we might as well have a novel at once, with as much of the *utile*, and a little more of the *dulce*.

The truth is neither more nor less than this, that the author has ventured out of his depth in writing on science in general, and particularly on mathematical science. Had it been otherwise, he would not have called that process of reasoning known by the name of the *Method of Exhaustions*, a process for measuring curvilinear spaces, though it is true that such was the object of its earliest application in the hands of Archimedes; he would not have placed Wallis's algebraical discoveries (that of negative exponents, for instance,) under the head of geometry, because in Montucla it is under the head of *géométrie*, the French word meaning, as is well known, mathematics in general, as often as what we call

geometry. Thus Laplace was *un grand géomètre*, though he applied nothing but algebra, taking the word in a wide sense. He would not have said that Taylor's Theorem is (there is it is true the safety-valve *perhaps*) the most comprehensive proposition in mathematical science, when it is so well known to be contained as a case, and a very limited case, in that of Lagrange, which is itself but a case of that of Laplace, which is a case of one given by Mr. Murphy, some years ago, in a volume of the Cambridge Philosophical Transactions. He would not have asserted (page xiv.) that Vieta used equations with all the terms positive, (a thing which never occurs once, in the sense in which those words are always used,) or would he have announced that no new principle has been discovered in algebra since the time of Descartes, in the face of Fourier's posthumous work, which announced for the first time, the general principle of which the *rule of signs* of that same Descartes is but a mere glimpse.

We shall now leave Dr. Thomson as a copier of preceding writers, and consider the manner in which he has brought down the history to our own times. The only charge of which we entirely acquit him, is of the nationality usually attributed to his countrymen. He dismisses Maclaurin in the following words:—‘Maclaurin may be mentioned as another mathematician who did credit to his country;’ and of Robert Simson we can find no mention at all.

We shall take as a sample the continuation of the history of geometry (that is, *géométrie*,) from Maclaurin who was ‘a credit to his country’ downwards. And this is such an exquisite performance, that we much fear our readers will suppose our remarks upon it to be meant in ridicule. Far from it; when we consider what a host of discoveries was made abroad, not forgetting some at home, and how the events which occurred between the death of Newton and the present time, changed the whole face of mathematics, so that books written at that period seem now to be in a foreign language; we cannot surely permit ourselves to ridicule so epic a description of the decline of science in England, and so exact and satisfactory an account of its restoration.

After stating that the mathematicians of Britain, and those on the Continent, kept pace with each other for some time, ‘though the algorithm used by each was different,’ meaning, we suppose, ‘from that used by the others’; he describes how the ‘race of British mathematicians, at one time so numerous and so splendid, was reduced to a very small number indeed. It is true that mathematics still continued to be cultivated at

Cambridge, but they (query, the mathematicians) satisfied themselves with studying the *Principia* of Newton, and neglected or despised the splendid improvements and discoveries of the continental mathematicians.' This is correct enough in general, excepting only the assertion that the *Principia* of Newton was at one time the exclusive study at Cambridge. That foreign works were not read is true, but surely Fluxions were studied, and where, in the *Principia* of Newton, are they treated of? We had an idea, but we find from the work before us that we were wrong, that this same Cambridge which allowed the mischief, at last provided the remedy, by exerting itself to introduce the continental discoveries, by writing elementary works on a different model from those actually in vogue, and so on. We believed it impossible to point out an English, or even British, writer, antecedently to the Cambridge reformation, who had given the elements of the continental discoveries, and therefore, but for what we afterwards found, we should have thought it somewhat hard to specify the faults of that university without dwelling a little upon its redeeming qualities. But this was all pure ignorance, for it seems that the restoration of mathematical knowledge in Great Britain was owing to circumstances of a totally different nature, which are detailed with a proper attention to the chain of causes. The first of these was 'the illness of Professor Vilant,' of St. Andrew's. What it was that laid up the worthy Professor we are not informed: judging by probabilities, it could not have been Asiatic cholera; it might have been gout, or it might have been only dyspepsia; but whatever it was, let us be thankful, for, in consequence of it, 'a little after the middle of the last century, *Mr. West* was appointed to teach the mathematical class.' 'West possessed an uncommon mathematical genius, as is evident from the slightest inspection of his *Elementary System of Geometry*, which he published while a teacher.' How humiliated we felt when we read this; that the illustrious West, for illustrious he must have been, should never have been heard of by us, was just awful to think of. We immediately set off on a voyage of discovery among the second-hand book-shops, hardly hoping that so bright an hour was in store for us, as that which should put us in possession of the works of the great restorer. To our joy, we found the great West; that is to say, his '*Elements of Mathematics for the use of schools*, comprehending geometry, conic sections, Mensuration, and spherics, illustrated with thirty copper-plates.' We hardly knew how to understand Dr. Thomson, when he said the slightest inspection of West would show his uncommon

mathematical genius. But by 'slight inspection,' he must mean, looking at the first sentence of the preface, where the great West announces 'an attempt which proposes great innovations in the long-established system.' Here then is the source of all our improvements; it is true that the great innovations principally consist in alterations of Euclid, after the manner of writers on geometry, and we find nothing but treatises on conics and other geometry, the whole done with such commendable care and clearness, that where there is one better writer than West, there are five worse. But we must proceed with Dr. Thomson's history of modern mathematics. How did West teach? 'His mode of teaching seems to have been admirable,' (our author is such a cautious man, that he *values* even the great West), and he had the merit of infusing his own spirit into a number of young men who have contributed not a little to the recovery of that high rank in mathematical science which formerly belonged to British mathematicians.' Who were these great men? The first was not exactly Playfair, but a personified hypothesis about Playfair, for 'the late Professor Playfair was not indeed the pupil of West, but he was his friend and contemporary, and both had been educated at the same university. It is not unlikely, therefore, that he may have been indebted for his passion for the science to his intimacy with West.' Unfortunately for the theory of the restoration, Playfair, though one of the most clear-headed of men, and a beautiful writer, neither made mathematical discoveries, or even cultivated, to any (from his writings) very perceptible extent, the continental mathematics. The second edition of his *Outlines of Natural Philosophy*, published in 1816, is entirely on the old model, that year being the one in which the Cambridge translation of Lacroix was published, from which, in our theory of the restoration, we date the *bonâ fide* introduction of the continental mathematics. 'The late Sir John Leslie was a pupil of West, and indebted to him for all his mathematical knowledge. He was possessed of a true mathematical genius, and though not familiar with the general analytical methods which are now in constant use, yet his mathematical knowledge was respectable.' This again is unfortunate, for Sir John Leslie, though an experimental philosopher of talent, was not only not familiar with, but in a great degree opposed to, the modern analysis. The accumulated bad taste of the following paragraph hardly needs comment:—

'But the man who does the greatest credit to Mr. West is Mr. Ivory, who has raised himself to the very highest rank as a mathe-

matician ; who has cultivated every branch of the higher calculus with the most complete success ; who is critically acquainted with the whole history of mathematical discoveries, and is now universally admitted to be the first mathematician at present in Europe. Thus he has rescued Great Britain from the stigma affixed to her, of inferiority in mathematical skill to the mathematicians on the continent. Cambridge also of late years has produced different eminent mathematicians, the most celebrated of whom is Sir John Herschel.

‘ It would be impossible in this hasty sketch, to give the slightest idea of the prodigious improvements which have been made in mathematics during the progress of the last century. The task is an Herculean one. It has been frequently attempted, but never yet executed. The individual best qualified for such a task is Mr. Ivory. Were he to execute it, he would confer a boon of no ordinary magnitude upon science, and add a new wreath to those with which Great Britain is already encircled.’

When such trash as the preceding is widely circulated under the name of a Regius Professor, it is time, without any mincing, to call things by their broad names, however unpalatable those names may be. We are convinced that the first person to be disgusted with this fulsome flattery and vulgar nonsense, will be the eminent philosopher who is thus coupled with, if not made a sort of appendage to, worthy Mr. West. To prevent misconception, we shall say what we think of Mr. Ivory. All mathematicians know that he is a very great mathematician, a man of first-rate original power, to whom the sciences, and physical astronomy above all, are indebted to an extent which will cause his name to be enrolled with high honour in every future enumeration of the successors of Newton. He has the singular merit of having cultivated the modern analysis at a time when it was at its lowest state in Great Britain. But it is far from being universally admitted (meaning of course by those who understand the subject), that he is *the* greatest mathematician in Europe, because, as many know, that is a point which contemporaries are not competent to decide: least of all Dr. Thomson, who evidently does not understand that high calculus of which he talks so fluently. To settle whether Ivory is to be called the greatest mathematician in Europe, would be by no means easy, so long as Gauss, for instance, is alive: and it is no small compliment to either, that we must cite such a man as the other, to prove the difficulty of deciding. The same may be said of Sir John Herschel, who is named as the most celebrated of the Cambridge men. There is a story told of Dr. Johnson, that being once detained by the rain in the portico of a church after sermon, some one or other, who wished to have the credit of being

thought his acquaintance, said to him, 'Dr. Johnson, we had an excellent sermon to-day.'—'That may be, Sir,' said the doctor, 'but I don't see how *you* can know that.' The application is easy enough: Mr. A. or Mr. B. may be *philosophorum facile princeps*; but how is Dr. Thomson, who makes Ivory a credit to West, because the former has cultivated a calculus which the latter knew nothing about, to be the judge of this?

The assertion about Mr. Ivory having 'rescued, &c.,' is a combination of ignorance, unfairness, and bad English. In the first place, how can one man, be he who he may, rescue a whole country from the charge of neglecting a useful study? He only serves to rivet the imputation still more firmly, by showing that there is no physical impossibility in the case. And, in point of fact, is the 'rescue' the work of any one man? We say nothing of the comparison between Great Britain (not British mathematicians) and the mathematicians on the continent, because this is a mere point of style, and if we were once to begin, there would be no end of temptations to expose that of our author.

We had written thus far, and were preparing to close by saying that we should not follow the author into subjects with which we are less acquainted, when it struck us that possibly Dr. Thomson might be the author of the *History of the Royal Society*, published in 1812, by a Dr. Thomson. On looking at this work, we find that the two authors are the same, and that some of the present treatise is taken from the history. We are convinced of the identity of the two by similarity of names, &c., and a common way of spelling fluxions, (which the two doctors, in defiance of etymology, write *fluxions*.) And we were much surprised to find that the author has retrograded very much since 1812. His *History*, &c., is in many matters a convenient work of reference; and though we cannot say it contains a good sketch of mathematical history, yet what is there written on the subject is of a character so much more correct and judicious, or at least nearer to correctness and judgment, than what we have here reviewed, that we should have no hesitation in appealing to the author of 1812, against his degenerate successor of 1834. But we shall content ourselves with recommending the author to know a little more of mathematics before he next attempts to write on the subject. We would not have it supposed that we wish to annoy him in the smallest degree more than is absolutely necessary for the attainment of a justifiable public end. We are told, and believe because we are told, for we are no better judges on

that point than he is of the relative merits of the highest mathematicians, that he is a very good chemist. But '*Que diable allait-il faire dans cette galère ?*' Why did he put the respectable name which he has gained in one walk of science, and the respectable title which he holds, at the head of a crude, hasty, incorrect piece of compilation upon all the sciences, both those which he knows, and those which he does not know? thus furnishing, so far as in him lies, encouragement and example to what we will call the inaccurate school of history. Such essays as his have a tendency to destroy all confidence in the history of science, which, from its nature, is more full of monuments than any other, being for the most part, the history of works still existing. We have not entered much into exposure, because we firmly believe no one in the smallest degree acquainted with the subject can fail to detect quite enough to form an opinion in any one page of the parts which relate to pure and applied mathematics. We end by again reminding the reader that nothing is either affirmed or denied of the work itself to which the subject of our article is an introduction, and which we have not examined.

MICHAEL JOSEPHS' ENGLISH AND HEBREW DICTIONARY.

FOREIGNERS are frequently asked in what language 'they think, and whether they ever attempt to think in the language of the country in which they reside. Such questions originate in widely-circulated, yet erroneous and gratuitous assumptions, that man cannot think at all except in a language, and that he can think in one language only, and that the language in which he thinks must be his mother-tongue. Upon the weak basis of such and similar premises are frequently erected theories of error which are more or less injurious to instruction in languages.

Many facts might convince us that man is able to think without words; not merely without writing or pronouncing words, but even without having them in his mind. The deaf and dumb manifestly think before they have been taught any language. If the words necessarily presented themselves with the thought, every thoughtful person would be a ready speaker, if not prevented by some mechanical defect in his organs of speech; but we frequently observe, that a ready utterance and great ease of style are not certain indications of much

thinking. If we observe the process of our own mind in thinking, we may frequently perceive, that after having arrived at a point of thought which gives us satisfaction, we remain dissatisfied with the words in which we express our thoughts. Persons who have original thoughts cannot always express them in words already extant, and are therefore obliged to coin new expressions in order to avoid tedious circumlocutions; as, for instance, Melloni, who has lately obtained the Rumford medal of the Royal Society for his discovery of the transmission of heat by certain bodies in a manner similar to that in which light is transmitted by transparent and translucent substances, must have been at a loss how to express in one word the peculiarity of certain bodies in this respect. Some of his followers, for want of adequate expressions, have begun to speak, in reference to heat, of the transparency of rock-salt, and of the comparative opacity of glass. They say, some bodies which are transparent for light are opaque to heat; and, *vice versâ*, some are transparent for heat which are opaque to light. Others, for want of an expression already in use, prefer to employ the word *trans-thermous*, and others, more consistently, the term *diathermous*, calling rock-salt a *diathermous* body. This and similar expressions, which have very recently been introduced into the English language, will, in a few years, be as generally received by authors and lexicographers as the words *galvanism*, *electricity*, *thermometer*, *barometer*, *air-pump*, *voltaic*, &c. which were unknown to former generations; or it may be that the discoveries of Melloni will introduce a word like *Mellonism*, because existing languages offer no word to express his idea.

The above observations may convince us that man can think without words. If man necessarily thought in words he could never overstep in his thoughts the fixed boundaries of a dictionary; and the discoveries of Galvani, Melloni, Faraday, and others could never have been made.

It is nevertheless certain, that by the effort to embody our floating thoughts in words, they receive a degree of definiteness which they had not before; and that thus we are ourselves benefited by the endeavour to impart to others our own ideas: and it is also certain, that our clearest conceptions present themselves at once to our minds clothed in words; and that these words are usually, although not necessarily, those of our mother-tongue. The following observations may convince us that thoughts may first come to our mind dressed in any language with which we are well acquainted, and not merely in our native tongue. Persons who have been engaged for many hours in the heat of Latin disputation frequently forget themselves so far as to speak a few words in the same language

to their servants. After having lived several years in a foreign country, some idiomatic phrases current among the people among whom we dwell come with more readiness upon our lips than the corresponding expressions of our native tongue; and, lastly, if we are well versed in any foreign language, we are able to understand a public speaker, and a book written in the same, with such a degree of rapidity, that we have no time for translating that which we have heard and read, into our native tongue in order to understand it. This readiness is requisite in order to feel the beauties of style of any writer. The beauties of a poet are lost upon us if we are still so little versed in his language, that we cannot feel them but through the medium of our own. Hence it appears that our study of even the ancient languages is of comparatively little use especially for the cultivation of taste, unless we can what is usually called think in the same; that is, unless we can receive and convey thoughts directly through their medium without passing along the circuitous road of another language. It cannot be denied, that in our study of the ancient languages, the reception of truths and the discipline of the mind are the main object, and that the writing of exercises in these languages, and the habit of speaking them, is chiefly to be recommended because it is the only means of acquiring the capability of the so-called thinking in the same, by which we are enabled to read profitably. Therefore it is really useful, and not (as many deem it) an idle play, to peruse books like *Johannis Buxtorfii institutio epistolaris Hebraica, sive de conscribendis epistolis Hebraicis liber*; and these are the reasons for which we recommended מִלִּים מִדְּרַשׁ, an English and Hebrew lexicon, to which is added, a selection of proper names occurring in Scripture and in the Rabbinical writings, by Michael Josephs, London, 1834, 8vo., price one guinea. This work, the first part of which we have already noticed in a previous Number, we consider to be better than the other English and Hebrew lexicons now extant, because the author does not deal so much in circumlocutions of his own invention as his predecessors, who appear to have been over anxious to avoid the offence which certain Rabbinical expressions might give to the feelings of Christians, and who, therefore, have preferred to give circumlocutions of their own instead of the genuine Rabbinical expressions. The work before us approaches also nearer than other English and Hebrew vocabularies to the dignity of a lexicon, because it not merely places a number of Hebrew words beside an English word, but frequently gives the authorities for their application, and also the connexion in which they occur; there are often even whole passages given, in order to show the connexion in

which certain words occur. Some articles contain valuable contributions to Hebrew lexicography, and observations which are either entirely new, or which have been overlooked by other writers. Mr. Josephs describes the nature of his work as follows :—

‘ Hebrew has been termed a poor language, it having been an established principle not to admit any words to be genuine but such as are to be found in Scripture. This is, however, too exclusive and arbitrary, and in a great measure untrue; for although many words have been lost in the abyss of time, it must, nevertheless, be borne in mind, that the language was in colloquial use until the destruction of the first temple, and continued (notwithstanding its deterioration so much deplored by the pious Ezra) to be cultivated among the priests and doctors of the schools during and after the period of the second temple, when many books were composed which are no longer extant. The Mishna, however, remains, the language of which, with some technical exceptions, is pure Hebrew: this is evident from its construction, although the words may not be found in Scripture in precisely the same form; such is the decided opinion of Kimchi, Maimonides, Misrachi, and others (vide Notes in Hebrew Preface). In the arrangement of this work, the order of Dr. Johnson’s English Dictionary has been adopted; and the Author has endeavoured, as far as the distinct character of each language could be reconciled, to give a Hebrew term with its different shades of significations, corresponding with that of the English Compound words, however, which in Johnson are arranged under their respective alphabetical letters, are here classified under their primitive word, Father, Mother, &c. Every substantive and verb has been rendered by corresponding Hebrew words; *e. g.*, under the English word “to cover,” the words *סָכַךְ, צָפָה, כִּסָּה, הֶעֱמָף, חָפַף*, &c. will be found; and under the nouns “cover,” “covering,” are placed *חֹפֶה, מִסְךְ, מִכְסָה, יָצוּי*, &c.’

Hence it is evident that a good Hebrew and English dictionary must be a sort of Hebrew synonymic. This is a use of such works quite forgotten by those who despise them. But referring to the article ‘to cover,’ we find *צָפָה* omitted.

‘ The adjectives have been rendered with a strict attention to their various combinations and the form in which they are found in Scripture; for although these words may apparently represent the same general idea, they nevertheless vary in their particular significations, like different shades of the same colour. It is for the student, therefore, to select such words as may be congenial with his subject.

‘ As the Hebrew verbs differ materially in their government

from other languages, the various constructions of which they are susceptible have been carefully pointed out, as well as the prepositions required after them; to this point the strict attention of the student must be directed; for very frequently the signification of a verb is wholly changed by its combinations with the accusative **את**, the dative **ל**, the ablative **ב**; nay, very often another preposition gives the verb an opposite meaning; *e. g.* the verb **נָגַשׁ** with **אֵל**, signifies “to approach,” whilst with **ל** it implies “to go away.” Is. xlix. 20, &c. All the ancient, and most of the modern grammarians have considered the third person singular, masculine gender, as the root of the verb; *e. g.* **לָמַד** which signifies “he has learned;” this form is, however, too complex, and can only tend to mislead the student. The author has adopted the ‘plan of Ben Seeb of putting the infinitive (**מִקְוֶה**) as the radix.’ Professor Hurwitz has followed the same method in his etymology and syntax, of which the second edition has just now been published.

‘In some adjectives of the Rabbinical form, such as **מְלָאכָוִיתִי** “mechanical,” **שְׂכִלִי** “rational,” &c., an additional **י** has been affixed to distinguish them from nouns with the possessive pronoun.

‘In the translation of scriptural quotations, the Author has invariably adhered to the much admired English version of the Bible, except when a deviation would tend to illustrate some passages seemingly obscure; but in such cases the authorities of eminent philologists, such as Kimchi, Mendelsohn, Eichel, Ben Seeb, and the learned Gesenius, are respectively quoted; and with a view of further illustrating the work, the author has introduced a selection of Rabbinical aphorisms and proverbs from the Talmud, some of which will be found to correspond with the English ones.

‘Yet, notwithstanding the care which has been bestowed on this laborious undertaking, errors both in typography and compilation have been discovered subsequently to the appearance of the first part. The author is aware that a work of this nature can scarcely ever be deemed complete; nor has he the vanity to suppose that he has occupied the ground so as to leave no room for further improvement. If, however, he have succeeded in smoothing the rugged and almost untrodden path—if he have succeeded in giving such ample and diversified explanations as will enable the inquirer to ascertain all the varied meanings and applications of terms in the sacred language, he will feel himself justified in claiming some credit

for that which he has performed, rather than in meriting censure for that which he might have accomplished.

‘The author cannot better conclude than in the words of the great English lexicographer: “Mankind have considered the writer of dictionaries not as the pupil, but the slave of science, the pioneer of literature, doomed only to remove rubbish and clear obstructions from the paths through which learning and genius press forward to conquest and glory, without bestowing a smile on the humble drudge that facilitates their progress. Every other author may aspire to praise; the lexicographer can only hope to escape reproach, and even this negative recompense has yet been granted to very few.”’

In order to exemplify how Mr. Josephs has practised his principles of lexicography, we transcribe a few articles:

LILY, שושן, more properly חֲבַצְלֵת, *vide* rose.

ROSE, שושן, שושנה plur. שושנים, נֶרְדָּא Ch., a white rose.
נֶרְדָּא חורא

כְּשֹׁשְׁנָה בֵּין הַחֹמִים, “as the rose among the thorns.”
Cant. ii. 2. Mendelsohn.

שִׁפְתֹתָיו שֹׁשְׁנִים, ‘his lips are like roses.’ Ibid. v. 13.
Mendelsohn.

Most persons render שושן or שושנה a lily, and חֲבַצְלֵת a rose; Gesenius and Schröder render both nouns ‘lily,’ and the latter uses the Chaldaic word נֶרְדָּא for ‘rose.’ It would, however, appear by the quotations above cited (and particularly by the second, Cant. v. 13, which is descriptive of the beauty of the lips), that Mendelsohn’s translation is most correct. Rashi (רשׁי) seems also to favour this opinion in his Commentary on Cant. ii. 2, which he explains thus:

‘As the שושנה, though surrounded with prickly thorns, ותְּמִידָהּ עוֹמֶדֶת בְּנוֹיָהּ וְאַדְמִימוֹתֶיהָ, still retains its beauty and redness,’ &c. &c.

ROSE-WATER, מִיץ שֹׁשְׁנִים

In Newman’s Dictionary we find merely—

LILY, חֲבַצְלֵת

ROSE, שושנה water, Ch. מִי נֶרְדָּים

Schröder has—

ROSE, נֶרְדָּ, mit dem Artikel נֶרְדָּא Rabb. und Chald.; die weisse Rose נֶרְדָּא חורא; die rothe סומקא נֶרְדָּא; eine frische

וְיָרֵךְ חֲדָשׁ; er blüht wie eine Rose כְּצִיַּת הָרֹדֶף, Hebr. (eigentlich wie ein Olivenbaum blüht er).

We have purposely chosen one of the best articles of Mr. Josephs' lexicon; and we think it therefore right to qualify our approbation by transcribing one of those which we cannot approve:

‘PURGATORY, שְׂאוֹל וְתוֹפֶת, גֵּיאַ הַנּוֹם.’

These expressions sometimes correspond with *hades* and hell, but we greatly doubt that they ever occur for *purgatory*.

Theology has been rendered by חֻקֵּי אֱלֹהִים; but we think that Newman's rendering by חֻקְמַת אֱלֹהִים is preferable, because חֻקֵּי אֱלֹהִים means literally ‘præcepta Dei,’ whilst חֻקְמַת אֱלֹהִים means ‘sapientia Dei,’ that means here passively the knowledge which man has of God. So we might also object to the rendering of *theocracy* by מַלְכוּת שְׁדֵי regnum omnipotentis, βασιλεια τοῦ παντοκράτορος, because *theocracy* signifies a certain form of government rather than the kingdom itself. Though it is difficult to find for all these expressions an adequate Hebrew word, we fully approve of the attempt to translate those words into Hebrew for which no classical terms can be found. In this respect Mr. Josephs has materially improved the second part of his work. We infer that he has considered as worthy of notice, our former complaint, that words like *baptism*, *knight*, *monastery*, *monk*, were mostly omitted. We still could wish that he should attempt a rendering of these words, instead of inserting words like *pudency*, *puisne*, *puissance*, *puke*, *ruination*, *omniparious*, *opacous*, &c., which are scarcely English. Those who think that, in a dictionary of this kind, only the words which occur in the most ancient Hebrew writers should be noticed, forget that, for the expressions of classical Hebrew, few would open a volume of this kind, and that to omit Rabbinical words of a more recent date, is a defect equally to be regretted with the contracted views of those authors of Latin dictionaries who think to do a good work by expelling the *vocabula barbara minus idoneo auctore sparsa in lexicis*. Good scholars will consult their dictionaries more frequently for semibarbarous than for classical expressions.

The Appendix, containing a list of proper names of countries, towns, rivers, &c. would be very useful if more complete. It does not fill three pages. The Hebrew poems recited at the anniversaries of Jewish charities in London, and many circular letters of the chief Rabbi, are specimens of Hebrew composition by the author of this dictionary.

Dr. Arnott's *Elements of Physics*.—*Introduction*.

IF a really philosophical physician could be induced to devote the fruit of an enlarged professional and general experience to the instruction and improvement of his fellow men, an extraordinary result of good might with reason be expected. That portion of the education of man which ought to be considered as the province of the physician is what may be termed the physical education of the human being, and this begins with his existence. But of medical men, few have been sufficiently skilled in the observation either of physical or of mental phenomena, to fulfil this duty even in a moderate degree, much less in a philosophical manner. Ignorant of physics (to use the word in its wide sense), they have by consequence been ignorant of the principles or laws by which all nature, organic as well as inorganic, is governed. If possible more ignorant of the science of mind, they have, as might readily be presumed, not thought themselves called upon to mark the share which physical have in producing mental phenomena. There have been indeed several distinguished exceptions ; but the number of these has not yet been sufficiently great to produce any very important results. The scheme of education proposed by Dr. Arnott, part of which he has developed and reduced to a practical form in the work before us, and on other parts of which he is said to be now employed, will have, we trust, a powerful effect in increasing the number of those exceptions, by stimulating other physicians to devote more of their attention to the same noble objects.

In the following remarks, we shall confine ourselves to a brief exposition of Dr. Arnott's views on the subject of education, as exhibited in the excellent Introduction to his book.

It may be proper here to premise, that Dr. Arnott's scheme of education is not merely calculated for those who can afford to devote a large part of their lives to the sole business of education. Hitherto, almost all the projectors of schemes of education have had in view this class only. Among others, even Milton and Locke, although both men of great benevolence, seem in their remarks on education, to have had in view no education but that of the gentleman. Even *their* minds had not perceived, that education was a blessing that could be widely diffused. Dr. Arnott observes that from such works as he gives an outline of, with less trouble than it now costs to obtain familiarity with one new language, a man might obtain a general acquaintance with science.

"Every man may be said to begin his education, or acquisition of knowledge, on the day of his birth. Certain objects, repeatedly presented to the infant, are after a time recognised and distinguished. The number of objects thus known gradually increases, and from the constitution of the mind, they are soon associated in the recollection according to their resemblances, or obvious relations. Thus sweet-meats, toys, articles of dress, &c. soon form distinct classes in the memory and conceptions. At a later age, but still very early, the child distinguishes readily between a *mineral* mass, a *vegetable*, and an *animal*; and thus his mind has already noted the three great classes of natural bodies, and has acquired a certain degree of acquaintance with *natural history*. He also soon understands the phrases 'a falling body,' 'the force of a moving body,' and has therefore a perception of the great physical laws of gravity and inertia. Thus, having seen sugar dissolved in water, and wax melted round the wick of a burning candle, he has learned some phenomena of chemistry. And having observed the conduct of the domestic animals, and of the persons about him, he has begun his acquaintance with physiology and the science of mind. Lastly, when he has learned to count his fingers and his sugar-plums, and to judge of the fairness of the division of a cake between himself and his brothers, he has advanced into arithmetic and geometry. Thus, within a year or two, a child of common sense has made a degree of progress in all the great departments of human science; and in addition has learned to name objects, and to express feelings, by the arbitrary sounds of language. Such, then, are the beginning or foundations of knowledge, on which future years of experience, or methodical education, must rear the superstructure of the more considerable attainments which befit the various conditions of men in a civilized community.

"Education has reference to the mind or to the body. As concerns the mind, it may be directed either to the mere *intellect*, often called *pure reason*, or to the *habitual disposition for action* founded on the exercise of reason—in popular vague phrase, to the *head*, or to the *heart*. The most complete education, as regards the intellect, can embrace only an acquaintance with *history* in its most comprehensive sense, and with *science*,—acquired and strengthened by a knowledge of the signs of ideas, viz. the *audible signs of words or language*, in one or more idioms, and the *visible signs of letters, cyphers*, &c. : as regards the disposition or heart, it must consist in the formation of habits of feeling and determining according to reason, or virtuously."—*Introduction*, pp. 27, 28.

It is evident of what vast, of what paramount importance education becomes, when it is considered as including every thing, which acts upon and influences the human being from the day of its birth, in such a manner as to modify the train of feelings, and indeed the whole character of the mind.*

* The remarks in this and the following paragraph are taken, with a few slight modifications, from the article 'Education' in the Supplement to the Encyclopædia Britannica.

Those who include in education little more than what is conveyed in the term school and university education, and who entirely neglect all the circumstances which act during the first year, months, perhaps even moments of existence, form a very inadequate idea of it. To Rousseau belongs the praise of originating, this important branch of the science of education. He observed a variety of important facts in the minds of infants, and remarked how much might be done by those who are placed about them, to give good or bad qualities to their minds. Helvetius traced these circumstances to the very moment of birth; he even showed that some circumstances of the greatest importance may be traced beyond the birth. And if the power of education be so immense in generating trains of feelings that lead to virtuous actions, or trains that lead to the contrary, proportionally great must be the motive for improving and carrying it towards perfection.

We can do little more here than indicate our meaning. A brief illustration will perhaps render it more clear. Suppose the sight of a great minister of state, and the honour and consideration which he enjoys to be the commencement, and the political power which procures for him that honour and consideration, the end of a train in the mind of two individuals at the same time. The intermediate ideas in the minds of these two men may be very different. The mind of the one runs over all the honourable and useful modes of acquiring political power; the cultivation of all the most rare and useful qualities; the acquisition of every kind of political knowledge, from its most comprehensive generalisation to its most minute details; and along with that of the qualities necessary to communicate this knowledge most readily and to the best advantage. That of the other, has recourse to a different train—to the lucky accidents, the low arts of the political adventurer; servility to those above, and insolence to those beneath him; a voice loud in support of injustice and oppression (provided that they pay best), and a brow that never owned the blush of honest shame.

Dr. Arnott observes, that the science of nature, being considered as a continuous and closely connected system or history, to be clearly understood, must be studied according to the natural order of its parts, as any occurrence in history must be read in the natural order of its paragraphs. The following is the order to which he alludes: 1. physics, often called natural philosophy; 2. chemistry; 3. life, commonly called physiology; 4. mind. Dr. Arnott then discusses the important question, whether mathematics and logic should come at the beginning or towards the end of a course of

methodical study. But we must allow him to explain his meaning in his own words.

“The mathematics are at present generally made the beginning of the study, and the reason assigned is, that scarcely any object in physics, chemistry, or organic life, can be described without referring to *quantity* or *proportion*, and therefore without mathematical terms. Now this is true, but it is equally true, that the mathematical knowledge acquired by every individual in the common experience of childhood and early youth, along with the commencement of physics, chemistry, and life, as already explained, is sufficient to enable students to understand all the great laws of nature,—nearly as the knowledge of language obtained at the same time is sufficient, without any study of abstract grammar, to enable him to converse on all common subjects. There are few persons in civilized society so ignorant, as not to know that a square has four equal sides, and four equal corners or angles; that every point in the circumference of a circle is at the same distance from the centre, &c. Now so much of unity, simplicity, and harmony, is there in the universe, that such obvious truths as these are what give exact cognizance of the most important circumstances in the phenomena and states of nature. And indeed the science of quantity in its highest flights, being merely comparison of the various simple standards among themselves, or with other forms and quantities, and the standard being now familiar to all men living in civilized society, because types or examples of them are constantly under view; almost every person arrived at years of discretion knows them well, and therefore is really acquainted with the great fundamental truths of mathematics. After the general laws of nature are once comprehended, and the mind has become familiar with many of the material realities of the universe, the study of the higher mathematics becomes exceedingly inviting, because useful applications of the various truths are immediately perceived, and the mind acquires more precise acquaintance with the phenomena. A good course on mathematics thus is made to include higher courses on physics, chemistry, and life. Most persons find attention to *pure* or abstract mathematics as irksome as the study of a mere vocabulary of a language is to persons not permitted to read the compositions written in the language, and sure of never having to speak, or even to think, of half the subjects referred to by the words; and as it would be ridiculous to insist that a boy should show his book of words before he were permitted to see things, so is it to insist on the study of general mathematics, before persons in their common experience have fully exercised their perception in regard to the quantities or proportions found among things. This view explains why so small a proportion of the students, taught in the common way, become good mathematicians; and why, when pure mathematics are made the avenue to natural philosophy, it also is so much neglected. * * * Abstract or technical logic, which is a branch of the *science of mind*, has nearly the same relation to that

logic of common sense, which every man of sound mind uses in reasoning or conversing on any subject, as the abstract mathematics have to the mathematics of common experience, of which we have now spoken; and as a preliminary study, therefore, is of a piece with abstract mathematics, and has been commended as such on similarly erroneous grounds."—*Introduction*, pp. 29—31.

Here follow some remarks in regard to our public schools and universities, with which we do not altogether agree. We readily concede that at present some time is certainly lost in acquiring what is called scholarship, and still more readily do we concede, that time is, in a great majority of instances, thrown away in going through what may be termed the Cambridge course of mathematics and physics. At the same time it is to be observed, that to men in certain positions in society nothing will make up for the want of scholarship. It is no argument on the other side to say, that many men of strong minds get on without it. If those men get on well without it, they would get on better with it. We of course allude at present to persons who have occasion to speak or write much. The more successful they are, the more conspicuous the situations in which they are placed—the more evident, the more felt becomes the want (if such a want exist) of the acquirements of the scholar.

Dr. Arnott says, (*Introduction*, p. 31.) "The reason for bestowing much attention on the Greek and Roman languages was good some centuries ago, because then no book of value existed which was not written in one of these languages; but now the case is completely reversed, for he who learns almost any matter of science from old books is learning error, or at the least, knowledge far short of modern erudition." Now, as an exception to this general remark, we may mention a science, to which few sciences yield in importance, of which we deny that any thing like a competent knowledge can be acquired without a perfect mastery of the Latin language. We allude to the science of jurisprudence, a thorough and comprehensive acquaintance with which can no more be obtained, without a deep and extensive examination of the best systems of positive law, than an accurate knowledge of any of the physical sciences can be obtained without carefully studying the works of those who have had the best opportunities of "asking questions of nature." Now the system of positive law most valuable to him who desires to study law as a science, is, with all its faults, the Roman: and the Roman law can only be properly studied in the writings of the classical Roman lawyers, and their commentators; to do which, it is need-

less to remark, an accurate as well as familiar knowledge of the language is indispensable. We may add that he who professes to study the history of Rome or Athens without studying the jurisprudence of these states, is taking but a narrow and limited view of a wide and most interesting field of investigation. The history of European civilization, viewed from various aspects, is inseparable from that of Greece and ancient Rome; and the accurate study of the progress of this civilization, traced in the genuine monuments of antiquity, so far from being a mere intellectual exercise and a study barren of results, would tend most directly to generate more comprehensive and correct views of some of the most important relations in our social life.

There is another advantage to be derived from the study of those classical Roman jurists which, although subordinate to the one above alluded to, is of high importance. In the language of Professor Austin, 'the classical Roman jurists are always models of expression, though their meaning be never so faulty.' Of this expression too they are the only models, if we except some of Turgot's state-papers, and the writings of one or two continental jurists who have carefully studied the classical Romans. If this great country shall ever possess a body of laws, arranged in an order and composed in a style which shall not disgrace it, while the order, it is to be hoped, will be more philosophical than that of either Gaius or Blackstone, the style must be, not the rhetorical and prattling manner of Blackstone, as Professor Austin has aptly termed it, but the clear and unaffected, yet apt and nervous style of the classical Roman jurists.*

But there is a point of view, perhaps still more important, under which the study of the ancient languages may be contemplated. The study of the true nature of language in an invariable substance, such as a dead language, may be considered as the best introduction to the study of the science of the human mind, which introduction consists in an accurate knowledge of the value of words; including in this term, an exact discrimination of their various meanings taken severally, and a full comprehension of their relations to one another when arranged in that order which constitutes language. The ancient languages, when rationally taught, are, to a certain degree, from their regular and yet complicated structure, an excellent exercise in analysis and classification; and cannot, even in the present state of instruction, when the memory is almost the sole faculty called into play, be merely *remembered* in the same manner as the facts and even the con-

* See Professor Austin's Outline of a Course of Lectures on General Jurisprudence.

clusions of physical science can to a certain extent, and as modern languages may be entirely, which when acquired in the most expeditious, and therefore for many purposes, the best way, are a pure exercise of memory. It is well known that a man with a good technical memory may remember a large amount of the Cambridge mathematics and physics in such a manner, as to take a very high degree, and *almost appear to know* them,—that he may be even *crammed* (to use a phrase current in the university) to work problems to a certain extent. We have, besides observing it ourselves, heard it remarked by others, that since the publication of such works as Dr. Arnott's *Physics*, along with the immense good done by them, there is a vast accession to the number of persons who talk ignorantly and absurdly about physical science; but we believe, that if a person can correctly construe a tolerably hard passage of Thucydides or any of the Athenian orators, or of Tacitus or Terence, the chances are considerably in favour of his having in some degree used his *thinking* faculty, of his having made some expenditure of *independent thinking* in the process. And the kind of thinking, the trains of ideas with which he must necessarily become familiarized, if his study of these authors has been so conducted as to give him the power of reading them with moderate ease, will have a much more beneficial effect on the *whole* of his reasoning and active habits, than any exercise of any other kind.

With regard to the argument of those who say that the Greeks knew no language or literature but their own, and who show their contempt at the mention of such old by-gone writers as Thucydides and Tacitus, we reply, that it is very true that the world, in the days of Thucydides and Tacitus, was not so old, and therefore did not know so much as the world in these days in which we live, but that it is because we *know* the history (and to *know* it we must know also their language and literature) of the time and countries of Thucydides and Tacitus, as well as the history of our own times and country, that we are, or *ought* to be, politically and morally wiser than the contemporaries of Thucydides and Tacitus; just as a man knows more than a youth and a boy, because he has passed through the states of youth and boyhood. An example of the consequence of being ignorant of Greek literature and philosophy is seen in the fact of very able men devoting much valuable time to the elucidation of theories of morals, which, though *they* consider them quite new, are as old as the days of the earliest Greek philosophers. There is here, besides other evils, a manifest waste of time

and labour from the ignorance of what has been done before. This ignorance too mainly, we conceive, arises from the ignorance or imperfect knowledge of the ancient language; for besides the difficulty, almost amounting to impossibility, of procuring good and trustworthy translations, more particularly of the more subtle speculations of the ancient philosophers, men generally have a distaste for translations. This is seen in cases, where, from the less complicated structure of the language, as well as from its nearer approach to our own, there is more probability of obtaining a translation to be depended on; we apprehend that the number of those who have sought benefit from the perusal of Machiavelli, for instance, in a translation is extremely small. Moreover, in the case of the ancient languages, particularly the Greek, the very character of the outward form in which the spirit, whether of literature or philosophy, is clothed, is an additional inducement to an active and energetic mind to go in search of such spirit, and an additional gratification to the love of grappling with and surmounting difficulties, which is a characteristic of all healthy human nature.

Another evil, not a small one, is this: at the present day there is hardly a work of any kind, that professes to treat historically any subject, which does not begin at the beginning and tell us all that the Greeks and Romans knew and did or said as to certain matters. The diligence of writers in collecting such facts shows that they really set some value on them; and the monstrous errors with which nearly all such works abound, show the propriety of either getting at the truth as to matters of such remote history, or remaining altogether silent about them. It is true, when any subject is well treated historically, we have the *whole* history of it, which is more useful, and gives more pleasure than an imperfect history, which however must always be preferred to an inaccurate history. To show more fully what we mean, the reader is requested to turn to a short notice, in the present Journal, of Professor Thomson's History of Physical Science. Such a sketch would never be written by any man who had been trained to weigh well the import of written language.

It must be admitted, however, that a great waste of time is incurred under the present system of education, both at public schools and universities, in what is called Greek and Latin verse-composition. In consequence of classical distinction at the universities depending in a great degree on excellence in Greek and Latin versification, nearly all the efforts are directed to excel in a department which only requires some of the lowest and least valuable faculties of the

mind, we were about to say, of the understanding; but it may be a question whether that comes into demand at all. We have known several instances of men, of at least equal capacity with the successful versifiers, who lost nearly the whole time they spent at the university in consequence of this system. Not having been educated at a public school, and consequently not having attained that facility in the management of longs and shorts which used to be the principal accomplishment acquired there; but having, nevertheless, a taste and capacity for letters, they had come up to the university in the expectation, if they got nothing else, of at least enjoying more than ordinary opportunities of becoming acquainted with whatever was most valuable in ancient literature and philosophy. But as to the enjoyment of such opportunities, as to the encouragement of such tastes, and of such studies, they were soon undeceived. They soon found that those 'seats of learning' as they are called, 'bestow,' to borrow the language of one of the few persons in England at the present day, who really has explored what is valuable in ancient literature, 'attention upon the various branches of classical acquirement in exactly the reverse order to that which would be observed by persons who valued the ancient authors for what is valuable in them: namely, upon the mere niceties of the language *first*; next, upon a few of the poets; next (but at a great distance), some of the historians; next (but at a still greater interval), the orators; last of all, and just above nothing, the philosophers.'

In regard to Cambridge, it cannot be said that in that university attention has been directed almost exclusively to abstract mathematics. The Cambridge course of education includes a tolerably complete course of natural philosophy, perhaps the most complete of any mathematical school in the world. The great objection appears to be the length of time occupied in the study of what will never be of the slightest practical use to at least nine-tenths of those engaged in it. We will assume, and it would be easy to make good our assumption from the Cambridge University Calendar, that about one-tenth of those who read for mathematical honours at Cambridge, gain their subsistence in life by so doing, either by becoming fellows and tutors of colleges, masters of mathematical schools, or teachers in other colleges and universities. Of the remaining nine-tenths, a few obtain fellowships; the rest obtain nothing, after having spent the best lustre in the whole circle of their life in acquiring what might have been very well learned in a fifth part of the time, or one year. They become clergymen, lawyers, or physicians; and at the age of three or four and twenty, they

find themselves utterly ignorant of their profession, and of most other kinds of knowledge, with nothing to console them but the reflection of having spent those five or six years of their life in which the human mind is most 'quick to learn,' the memory being then in vigour, as well as all those energies that depend upon the elastic and unbroken spirit of youth, in *cramming* a little mathematics and natural philosophy, a little of the metres of the Greek choruses, and certain matters touching the management of the Athenian stage.

This assertion is by no means exaggerated with respect to many who go to the University of Cambridge from those districts of England in which good school education, preparatory to the university, cannot be procured. Those who have superior abilities, and who love to contend with, and conquer difficulties, fight their way through all obstacles, and are often crowned with complete success. Such a discipline undoubtedly makes some vigorous and powerful minds; but feeble spirits sink beneath it, and leave the university disappointed, discouraged, and with knowledge very little better than they took there. But how is this to be remedied? it may be urged: the university cannot give men abilities who come up without them; nor can it in the course of a three years' discipline, (the time in which a degree is obtained) instruct in elementary knowledge those who are supposed to come qualified for going through the university course, which is of necessity a fixed and prescribed course. But the university might discourage such youths from coming to try their fortune; it might positively exclude them by instituting, previous to admission into any college, a good sound university examination, one immediate consequence of which would be that all the schools would set about preparing their pupils for it, who are intended for the university; and another result would be, that many who now go to the universities, would not go at all, and would thus save their time and money, and turn to some less ambitious occupation than that of a professional life.

It has been asserted by some persons, who do not deny the great proficiency made in mathematics by many young men at Cambridge, that a long attention to mathematical pursuits impairs the reasoning powers instead of strengthening them. Such persons evidently have a notion that reasoning applied to mathematical subjects is a different process from reasoning applied to other subjects. If reasoning be, as defined by Locke, the finding out of intermediate ideas; the solving of mathematical problems is a good application of it. For what is a problem, but having given certain premises and a certain conclusion, to find the middle terms or inter-

mediate ideas that connect or bind together those premises and that conclusion? It is true, that unless a man bring some reasoning power to the study of mathematics, he cannot do this. But, it being granted that he does bring that power, how can the working of mathematical problems impair it.

The following remarks illustrate what we have been saying :—

‘As to the higher mathematics, while they merit great honour, as being the instrument by which many useful discoveries have been made, and the conjectures of powerful minds have been confirmed, still a very deep investigation of them is neither possible to the generality of men, nor, if it were so, would it be of utility. This and many similar errors arise from persons not being in general taught to carry in their minds a clear conception of the general field of human knowledge, and so of the comparative importance of the different subdivisions, the possession of which conception is perhaps the most valuable single acquirement which the mind can make. He whose view is bounded by the limits of one or two small departments will probably have very false ideas even of them; but he certainly will of other parts, and of the whole, so as to be constantly exposed to commit errors hurtful to himself or to others. His mind, compared to the well-ordered mind of a properly educated man, is what the misshapen body of a mechanic, crippled by his trade, is to the body of the active mountaineer, or other specimen of perfect human nature.’—*Introduction*, p. 32.

The following observations are pregnant with truths of the highest importance and interest :—

‘It is not to be doubted, that a chief reason why in modern times so small a number of persons take correct and comprehensive views of the great domain of knowledge is, our retention of the names anciently given to the great departments of knowledge. Had these departments been first distinguished and methodized in modern times, they would have had, instead of the old Greek and Arabic names of physics, chemistry, physiology, metaphysics, and mathematics, names of similar import from the modern languages, intelligible to all who used them. Thus instead of physics, there would have been in every country the shortest term to signify *the general course of nature*; instead of chemistry, a term for *the elementary constituents of our globe*; instead of physiology, a term for *the nature of living being*; instead of metaphysics, a term implying *the nature of the mental faculties*; and instead of mathematics, a term for *the science of measures*. Now the very names of these branches of knowledge would at once have made every man sensible of the absolute necessity to him of a certain degree of acquaintance with them, and his attention, according to his leisure, &c., would have been judiciously directed to attain that.’—*Introduction*, p. 33.

Having thus far put the reader in possession of some of Dr.

Arnott's views, we shall now present to his inspection the following table of science, which is given at page 26 of his Introduction. Not that we consider his table of science as by any means one of the best things in his Introduction. From the signal failure of Bacon, D'Alembert, and Bentham in the attempt, it may be concluded that the construction of a table of science is no easy task. The table is inserted here as introductory to the interesting remarks that follow :—

1. PHYSICS.

Mechanics, hydrostatics, hydraulics, pneumatics, acoustics, heat, optics, electricity, astronomy, &c.

2. CHEMISTRY.

Simple substances, mineralogy, geology, pharmacy, brewing, dyeing, tanning, &c.

3. LIFE.

Vegetable Physiology.—Botany, horticulture, agriculture, &c.

Animal Physiology.—Zoology, anatomy, pathology, medicine, &c.

4. MIND.

Intellect.—Reasoning, logic, language, education, &c.

Motives to Action.—Emotions and passions, justice, morals, government, political economy, natural theology, &c.

5. SCIENCE OF QUANTITY.

Arithmetic, algebra, geometry, &c.

'This system will be exhibited,' says Dr. Arnott, 'in small bulk, viz. in five volumes, under the above or similar titles.'

'The book of five volumes would merit the name of the *Book of Nature*. To have all the perfections of which it is susceptible, it can be looked for only from associations of learned men: and even then, it cannot be compiled, as many encyclopædias have been, by each individual taking a distinct part or parts; but by the parts being undertaken conjointly by several persons, so that he who conceives most happily for students may sketch the plan, he who is learned may amplify and complete, he who is correct may purge, he who is tasteful may beautify, and so forth. After such a book existed, it would not become an object with talented individuals to write a *new book*, which again would necessarily have the imperfections of an individual attempt; but to assist, under the direction of a superintending council, in perfecting the existing work. The composition of the *Book of Nature* would be a worthy object of rivalry even between nations. At present a great part of human labour, and genius, and existence, is wasted for want of such a work. Students, from having no direction, or only that which is faulty, apply to subjects in unnatural order, and therefore neither well understand them at first, nor remember what they read. Many who study various works on the same subject, that the imperfec-

tions of one may be corrected or supplied from the others, are confounded by the difference of arrangement met with, and unless they submit to the laborious task of making a methodical analysis of all, they seldom have clear notions at last. The vast increase of labour also occasioned by ill-ordered study, discourages and disgusts the greater part of them. Now, if by the care of governments or of universities, the *five volumes* were in existence, and their authoritative character known, a spirited youth, when he began his studies, from seeing at once the limited extent of his task, would enter upon it with that alacrity and confidence which would soon make him accomplish the whole. During the complete review, also, of science and art then made, each individual would be able better to choose the occupation in life suited to his powers and character. And the minds of persons generally becoming thus fully informed in the season of their youthful vigour, would commence their flight in quest of new discoveries from greater elevations than their predecessors, and would be expected to attain still higher objects. The finest enterprises of human genius have been planned and commenced, and often accomplished, in early youth. There would be the further important consequence, that persons being made so soon to understand the beauty and grandeur of creation, would acquire an elevation of mind, rendering them much less likely afterwards to lapse into those sinks of indolence and vice which now engulf so many.

‘Were such elementary treatises once in existence, they would be maintained complete by a periodical incorporation of new discoveries; and if furnished with correct and copious references, they would form an index to the whole existing mass of knowledge. This *Book of Nature* would be of more value to the world, than any other conceivable institution for education, for it would convert the minds of millions into intellectual organs of advancement; while in the crowd, many would probably be found in every age, as highly endowed by nature, as any that have yet appeared along the extended stream of time.

‘The increased facility of acquirement here contemplated would by no means, as some would fear, put an end to the distinctions among men of *learned* and *unlearned*. The plan provides for more sound and useful information in the first grades of study, the influence of which would be felt through all; but it leaves the unlimited fields of mathematical research, of belles-lettres, of natural history, &c., as open as ever to the enterprises of leisure and of peculiar taste. It is true that the whole intellect of the community would be awakened, and that existing talent would everywhere be elicited, and employed in what it were most fit to undertake; but this result would be for the general advantage of the state.’—*Introduction*, pp. 34-6.

The following is a good illustration of the sum of all philosophy—CLASSIFICATION, that which Plato described as being the faculty of seeing ‘the ONE in the MANY, and the MANY in the ONE.’

'It has been a common prejudice, that persons thus instructed in general laws had their attention too much divided, and could know nothing perfectly. But the very reverse is true; for general knowledge renders all particular knowledge more clear and precise. The ignorant man may be said to have charged his hundred hooks of knowledge, to use a rude simile, with single objects; while the informed man makes each support a long chain, to which thousands of kindred and useful things are attached. The laws of philosophy may be compared to keys which give admission to the most delightful gardens that fancy can picture; or to a magic power which unveils the face of the universe, and discloses endless charms of which ignorance never dreams. The informed man in the world may be said to be always surrounded by what is known and friendly to him; while the ignorant man is as one in a land of strangers and enemies. A man reading a thousand volumes of ordinary books as agreeable pastime will receive only vague impressions; but he who studies the methodized *Book of Nature* converts the great universe into a simple and sublime history, which tells of God, and may worthily occupy his attention to the end of his days.'—p. 37, 38.

The Boy's Friend, or the Maxims of a Cheerful Old Man.

By Carlton Bruce. London, Harris.

Nothing more strongly marks the improvement in certain departments of education, than the present state of juvenile publications, both in regard to number and excellence. The youthful library, twenty years ago, was very limited both as to quality and quantity; but we now find on the book-shelves of children, information of which their great grandfathers lived and died ignorant. Indeed, the abundance begins to create some apprehension that the minds of the young will not be allowed to dwell sufficiently on one subject; that they will get a mere smattering of many things, and acquire a desultory and imperfect habit of learning and of thinking. A bundle of faggots is good only to burn, even though it be made up of rare materials; but a compact sound piece of timber of the commonest kind is available for many useful purposes. So it is with knowledge, which is nothing unless it can be turned to some practical use, and to be applicable to such use it must be good of the kind.

Book-making, mere book-making, one of the characteristics of the present day, has unfortunately been as busy with publications for children as in other departments. The discoveries of the voyager, the speculations of the philosopher, and the researches of the naturalist, are cut down and fitted (or rather an attempt is made to fit them) to youthful comprehension, without regard to the fact that the youthful mind is unpre-

pared for such food. It is worse than useless to dwell upon the labours of a Cuvier, the discoveries of a Herschel, or a Davy, until children are old enough to understand their value ; they look upon any one of them as no greater a man than Robinson Crusoe, or any other hero of the kind, and not quite so amusing.

Moral instruction is the first thing necessary, and for this purpose we consider tales, illustrative of important moral truths, as the most useful for children, because they address and excite the sympathies. All who assist in the work of education, either personally or by the pen, must bear in mind that it is upon these and not upon experience that they have originally to work. Much real knowledge may be mingled with such kinds of instruction, and if it bear upon the main object in view, it becomes doubly useful by being associated with some practical moral truth.

The sort of information in such books should be adapted to the age and capabilities of the pupil : the every-day circumstances of life are too often overlooked, because, being of common occurrence, they are supposed to be well known ; while less useful, but more ambitious knowledge is put in their place. Hence we see many, both children and grown-up persons, who have the reputation of knowing a great deal, and yet are really ignorant of some of the most ordinary concerns of human life.

Those common operations of nature which are incessantly going on around us, the habits of domestic animals, the simplest forms of mechanical and manufacturing industry, the society in which we live, the condition of the rich and the poor, of the industrious and the lazy—all these afford incessant opportunities of instruction, and are the more valuable because they are all intelligible. By the contemplation of such facts, the child is not only led to observe, but to reflect ; and the habit of reasoning is insensibly formed and strengthened by the power of connecting causes and effects, however simple. A love of truth is also gradually imparted, for a mind thus trained will not be content with an imperfect, or deceptive examination, and for the same reason it ceases to take things upon trust, or to be misled by appearances. A gradual progression from this early system to more difficult subjects may be beneficially pursued, paying due regard to their order and utility ; for it must be observed that to present to the mind an isolated or unavailable fact, is about as wise as giving the appetite ' the mustard without the beef.' For the same reason it is absurd to furnish a child with a string of unconnected moral maxims : like the texts in their copy-books, they are often

repeated, but they have hold only on the memory. When however a good principle is exemplified by rational fiction or a well-told story, it seizes on the sympathy and the imagination, produces reflection, and tends to lead to right action. It is a mistake to believe that early youth is the season for acquiring much knowledge; it is rather the time of preparation, the age when the habits should be formed on which depend the capacity for intellectual exercise and right conduct.

The book whose title is at the head of this article corresponds in some degree to our views. It is written, on the whole, with a regard to truth: the opinions are derived from experience; its style is of that sententious and compact kind which makes a strong impression. It dwells upon the little things of life, as well as upon the great; and what is better than all, it places these things generally in their true light. While it speaks on topics that interest all mankind, and on which only a man can speak, the author does not forget that he is addressing children. He gives a 'Why and a Wherefore' for his rules and maxims, and illustrates them by some forcible, touching, or humorous appeal to the sensibilities of his reader. We cannot do better than give a few specimens:—

‘HOW TO GROW RICH, WISE, AND HAPPY.

‘The rules, then, are these:—Mind your business, put by a penny a day, and never borrow. I care not a fig what your business may be, whether you are a shoe-black or a shop-keeper, a merchant or a mole-catcher; for when a man gets on in the world, he may get into any business he pleases. Only mind your business, so sure as you do this, so sure shall you have a business to mind.

‘Put by a penny a day, and do not omit to do this for a pound. This is a great secret in the art of getting money. It will promote industry, prevent extravagance, and give you confidence in yourself. Depend upon it, that if you can steadily practise the putting by a penny a day, you will soon lay by twopence; and that twopence, like the penny, will increase, until your savings will surprise you. Little will get much, and much more, and a rich man you must be. But mind, never borrow.

“If you borrow of an enemy, which by the bye is not an easy thing to do, he will come upon you for it just when you are not prepared to meet his demand. If you borrow of a friend, he will require a pound's worth of acknowledgments and friendly acts for every penny he lends you. No, no, let nothing tempt you to borrow, and then you will find people almost ready to put their money into your pockets. If you borrow, you depend on others; if you do not, you have to depend on yourself; and rely upon it, that if you cannot serve yourself, you can never be served by the whole world. Mind your business, put by a penny a day, and never bor-

row ; and if you do not in time become a rich man, I will be bound to forfeit all my estates in the West Indies. •

‘To be wise, it is only necessary to reflect on what you see. The mere sight of things amounts to nothing ; a fool may go round the world, and come back a fool at last, because he has no reflection. One man learns more from a mole-hill, than another does from a mountain. When gazing at a cook-shop will satisfy your hunger, and looking on a fountain assuage your thirst, then, and not till then, will you become wise by seeing many things.

‘Such is the uncertain tenure of riches, that the man who rolls along in his carriage to-day may be a beggar to-morrow in spite of every precaution. What then is the use of being rich, and wise, and happy, one moment, if you may be poor, and foolish, and unhappy the next ? Give me the riches, the wisdom, and the happiness, that will endure in death as well as in life, in eternity as well as in time. I will speak plainly what I believe to be the truth, that there are no real riches but those that will endure for ever ; no real wisdom which does not contemplate eternity ; and no real happiness without a well-grounded hope of a better world. These are the riches, the wisdom, and the happiness, which I recommend you to strive to obtain. Let others, if they will, be satisfied with a bag of money, a book-case, a badge of distinction, and a well-spread table ; but do not you be bribed by possessions which you must relinquish on this side the grave. Without the riches, and the wisdom, and the happiness, of which I have spoken, you would be poor had you the wealth of the world in your possession ; but with them you cannot fail to be richer than a Jew, wiser than a Solon, and happier than a prince.

‘MELANCHOLY.

‘Aye, mope away, my boy, and look miserable, and see if that will do you any good. I would have you bound apprentice to an undertaker, that your days may be passed in attending funerals. That face of yours would be invaluable in such a situation ; and would, infallibly, make your fortune. And so the sun is to shine, the trees are to put forth their green leaves, the birds are to warble, and all nature to rejoice, while you pull a dismal face, and endeavour to make others as miserable as yourself. Every breath of heaven reproves such ingratitude. If you will keep a record of your troubles, you will have troubles enough to record ; while he who keeps a grateful eye fixed on his blessings, shall be blessed in his basket and his store, in his going out and his coming in.

‘ON SCHOOL-DAYS.

‘In the midst of all the hopes you may encourage, the projects you may form, and the desires that for ever are rising in youthful bosoms, if you do not make the principles of virtue your foundation, all your castle-building will crumble into ruins. I had rather depend on a spider's web in a storm, than on the expectation of him who fosters vice and despises virtue. Experience has whispered it,

spoken it, and proclaimed it aloud, that the vicious shall not prosper; and the words of Holy Writ are—"There is no peace to the wicked." Be not deceived by the wealth, the popularity, and the glittering gewgaws of the unworthy. If the hope be not bright, and the heart at ease; if the pillow be stuck with thorns, and the fair feature be overshadowed with clouds, all the rest is as nothing: thousands of gold and silver will not lull a guilty conscience to sleep. Be vicious, and you cannot be happy; be virtuous, and I defy you to be miserable. Be not satisfied then with digging your little garden, and in sowing seeds there, but cultivate your heart and your head at the same time; for the seeds which you sow there shall spring up, and blossom, and bloom, when you are a man.'

The chapter entitled 'Yourself' is admirable. We have quoted enough to show how moral subjects are treated; we now give one extract to shew the mode in which facts are handled:—

'Every climate has its peculiar animal, on which its inhabitants are very dependent. In England we have the horse; in Asia they have the camel and the elephant. The llama ascends the mountains of South America; the dog scampers over the dreary snows of Kamtschatka: and the rein-deer traverses the inhospitable regions of Lapland: without the rein-deer, the comforts of civilized life could never be extended over Lapland. The inhabitants of this dreary country may be divided into two classes: the one lives on the coast by fishing; the other wanders about during summer and winter. When summer arrives, the wandering Laplander is obliged to undertake the most extensive journeys to the coast for the preservation of his deer; for the interior parts of the country, and especially the boundless forests, are so infested with gnats and other insects, that no animal can escape their persecution. The inhabitants kindle large fires, in the smoke of which the poor animals hold their heads to free themselves from the innumerable insects which annoy them. The mountains*, being comparatively free from these insects, are sought by the Laplander as a protection for his rein-deer.

'Some Laplanders have herds of more than five hundred rein-deer; others have not more than fifty. In summer they make cheese for the year's consumption; and in winter they kill a sufficient number of deer to supply themselves with venison. It is an interesting sight to gaze on a herd of rein-deer at the evening milking hour. They assemble around an encampment on the hills, when every thing appears in motion. The dogs run to and fro, barking; the rein-deer toss up their antlered heads, and bound forward towards the encampment. You never hear the sound of their feet on the ground, but the knee-joint gives a loud crack, so that when a whole herd are bounding along together, the crackling noise is very great. The maidens with light hearts go with their milk

* It seems that 'coasts' should have been written, not 'mountains.'

vessels from one deer to another, singing, laughing, and at times playing with their favourite deer. The foot of the rein-deer spreads wide when placed on the ground; this prevents the animal from sinking so deep in the snow as he otherwise would do.'

Having spoken so far in general commendation of the work, we must point out what we consider its defects. The author is too much of an egotist; though we admit that a certain portion of this quality belongs, and is necessary to, the plan of the book. But he holds himself up as *the one* worthy of imitation, and is guilty of egregious vanity in speaking of his own performances and accomplishments. This is not only bad taste, but bad example; and were any boy to strive to imitate in all respects what is thus proposed as his model, the result would be that much would be attempted and nothing done. We regret that, in a volume which contains so much good, anything that has a bad tendency should have found a place. As an example of what we consider serious errors, the pleasures of the country and the virtues of its inhabitants are thus exaggerated.●

'O the unutterable delights of the country! Surely it is weakness, yea, absolute wickedness, to dwell in the town when you can live in the country, unless duties and affections bind you to the smoky chimneys around you; or strong reasons prevent your changing a bad atmosphere for a good one. Many excellent things are in the town; but health, and innocence, and happiness, are worth them all.'

We grant that 'duties and affections' are hinted at, but as these are a part of virtue, so they are a part of happiness, and, whether in town or country, will produce the same results.

'If you can see, hear, feel, smell, taste, or understand, surely you will never compare the town with the country.'

This is really nonsense. Many people must live in towns in spite of bad smells, or the bad atmosphere, which nobody of course prefers to a good one. But what has all this to do with the matter? A judicious writer would endeavour to point out clearly the advantages and disadvantages of town and country residence, rather than exhort people to choose one before the other; for choice is generally out of the question. The object should be to shew the residents in each how they may make the most of their lot, and remedy such inconveniences as are severally incident to each. If a child is to be taught truth on such matters, it should be told that it is from towns that all improvements come, and that if there were no towns the country would soon become more ignorant than it is. The happiness and innocence of the country, as above contrasted with the implied misery and vice of towns, are hackneyed topics,

without the advantage, which many trite subjects have, of being true.

Again :—

‘ You may look for folly and finery in the town, where you may easily find them.’

Has our author ever been at a country fair, or in a village church, or in a village pot-house?

Though this book contains much that is good, we are of opinion it contains also something that is of a bad tendency. To a certain extent it is calculated to open the mind and to prepare it for the reception of truth ; but, as we have shown, it is calculated also to implant many notions which are not true, to present pictures of things not as they are, but as the author has been accustomed to see them. If such blemishes, as they seem to us, could be removed, the book would be useful, and might be recommended to be put into the hands of children.

KING EDWARD VI., HIS ENDOWED SCHOOLS.

[Collected from Strype's Ecclesiastical Memorials.]

ANOTHER act in this session (1 Edward VI., A.D. 1547), that related to religion, is that which gave the king all the colleges, free-chapels, chauntries, hospitals, fraternities or guilds, which were not in the actual and real possession of the late King Henry, to whom the parliament, in the thirty-seventh year of his reign, had made a grant of such like colleges, free-chauntries, &c., nor in the possession of the present king. By virtue of which act, there accrued to the king all the lands, tenements, rents, and other hereditaments, which had been employed for the finding or maintenance of any anniversary or obit, or any light or lamp in any church or chapel. And there were two good causes assigned for this gift to the king. The one was, for the dissolving of superstition, which these colleges and chauntries were found to be great occasions of ; the other, for the founding of schools of learning, and providing for the poor ; for so the preamble of the act gives us to understand : ‘ That a great part of superstition and errors in Christian religion had been brought into the minds and estimation of men, by reason of the ignorance of their very true and perfect salvation through the death of Jesus Christ, and by devising and fantasizing vain opinions of purgatory and masses satisfactory to be done for them that were departed. The which doctrine and vain opinion by nothing more was maintained and upholden than by the abuse of trentals,* chaunteries, and other provisions, made for the continu-

* A trental is an office for the dead, continuing thirty days, or consisting of thirty masses.

ance of the said blindness and ignorance. And secondly, that the alteration and amendment of the same, and the converting them to good and godly uses, (as for the erection of grammar-schools for the education of youth in vertue and godliness, and for augmenting of the universities, and better provision for the poor and needy,) could not in that present parliament be provided and conveniently done; nor could not, nor ought to be, committed to any other persons than to the King's highness, &c.'

But this act was soon after grossly abused, as the act in the former king's reign for dissolving religious houses was. For though the public good was pretended thereby, (and intended too, I hope,) yet private men, in truth, had most of the benefit, and the king and commonwealth, the state of learning, and the condition of the poor, left as they were before or worse. Of this great complaints were made by honest men: and some of the best and most conscientious preachers reprov'd it in the greatest auditories, as at Paul's Cross, and before the king himself. Thomas Lever, a fellow, and afterwards master, of St. John's College, in Cambridge, in a sermon before the king, in the year 1550, (Dec. 14.) showed, 'How those that pretended, that (beside the abolishing of superstition) with the lands of abbies, colleges, and chauntries, the king should be enriched, learning maintained, poverty relieved, and the commonwealth eased, purposely had enriched themselves; setting abroad encloistered Papists, to give them livings by giving them pensions, yea, and thrusting them into benefices to poison the whole commonwealth, for the resignation of those pensions: and so craftily conveying much from the king, from learning, from poverty, and from all the commonwealth, unto their own private advantage.' Thus he.

And bringing in grammar-schools, which these dissolved chantries were also to serve for the founding of, he told the king plainly, 'Your Majesty hath given and received, by act of parliament, colleges, chauntries, and guilds, for many good considerations; and, especially, as appears in the same act, for erecting of grammar-schools, to the education of youth in vertue and godliness, to the further augmenting of the universities, and better provision of the poor and needy. But now many grammar-schools, and much charitable provision for the poor, be taken, sold, and made away, to the great slander of you and your laws, to the utter discomfort of the poor, to the grievous offence of the people, to the most miserable drowning of youth in ignorance, and sore decay of the universities.' And then, for instance, he mentioned a grammar-school founded in the north country among the rude people there, (who yet were most ready to spend their lives and goods in serving the king at the burning of a beacon,) having, in the University of Cambridge of the same foundation, eight scholarships and two fellowships, ever replenished with the scholars of that school. Which school was now sold, decayed, and lost; and

more there were of the like sort so handled.* But this, he said, he recited, because the sale of it was once stayed for charity sake, and yet afterwards brought to pass by bribery, as he heard say, and believed it, because it was only bribery that customably overcometh charity. 'For God's sake,' as he concluded, 'you that be in authority look upon it; for if you wink at such matters, God will scoule upon you.'—*Strype*, ii. 101-103.

In another passage of the same sermon, he says :—

'Yea, and in the country many grammar schools, which be founded of a godly intent, to bring up poor men's sons in learning and vertue, now be taken away by reason of a greedy covetousness of you, that were put in trust by God and the king to erect and make grammar-schools in many places, and had neither commandment nor permission to take away the schoolmasters' livings in any place. Moreover, such charitable alms were there yearly to be bestowed in poor towns and parishes upon God's people, the king's subjects, which alms, to the great displeasure of God and dishonour of the king, yea, and contrary to God's word and the king's laws, ye have taken away. I know what ye do say and brag in the same places, that ye have done as ye were commanded, with as much charity and liberality towards poverty and learning as your commission would bear and suffer. Take heed whom ye slander; for God's word and the king's laws and statutes be open unto every man's eyes : and by every commission directed according unto them, ye both might and should have given much, whereas ye have taken much away.'—*Strype*, ii. 423.

How King Edward's good heart stood affected to the forwarding both of learning and sound religion too, appeared by appointing a school in his court for his henchmen, that is, his majesty's pages, and other youth attending on him ; and for encouragement of the schoolmaster, he assigned him a salary for life. For such a patent I have seen granted to Clement Adams, M.A., authorising him to be schoolmaster to the king's majesty's henchmen, with the fee of 10*l.* by the year for life, dated May 3, anno 6 Edw. Reg. But especially this appeared by his founding so many schools in the nation ;

* In the case of the dissolution of one of the chantries at Sandwich, together with its school, referred to in Number XVIII. p. 257, it appears that no school was founded in its place. The chantry at Blackburne also included a free grammar-school, as appears from the following extract from the Report of the Commissioners for Inquiry into Public Charities, vol. xv. p. 8:—"It appeared from an indenture dated in the 1st Henry VIII., produced by the plaintiffs, and by a decree of that Court in Hilary term, 2nd Elizabeth, that the said premises were given principally for the maintenance of a chantry priest, to sing and say mass, and other superstitious service in the chapel of our Lady, in the church of Blackburn, which chantry priest should teach a grammar-school and a song-school, if such a one could be had, and if not, a song-school ; and that by virtue of a commission granted by King Edward VI., in the fourth year of his reign, after the statute made for the dissolution of chantries, to the stewards of the said manors, the said lands and tenements had been demised by copy of court roll, to certain persons and their heirs, to the use of Thomas Burgess, late chantry priest, to the said chantry for his life, and afterwards to their own use."

more, by a great many, than any of his predecessors had done: For to compute only from the time that Bishop Goodrick had the great seal, in little more than sixteen months, he founded at least sixteen free-schools.

For besides the schools at Bury in Suffolk, at Spillesby in Lincolnshire, at Chelmsford in Essex, at Sedberg in Yorkshire, at Louth in Lincolnshire, and at East Retford in Nottinghamshire, with others founded by him in the years 1550 and 1551; these following owned the king for their founder, and were erected from December, anno 1551, being commonly called King Edward the Sixth his Free Grammar Schools, viz., Brymingham in Warwickshire, Shrewsbury, Morpeth in Northumberland, Macclesfield in Cheshire, Nonne Eaton in Warwickshire, Stourbridge in Worcestershire, Bath, Bedford, Guilford in Surrey, Grantham in Lincolnshire, St. Alban's in Hertfordshire, Tunbridge, Southampton, Thorne in Yorkshire, Gyggeswick in Craven, and Stratford-upon-Avon. These schools had governors appointed over them, as master and usher, and endowed commonly with twenty, thirty, or forty pounds per annum. And, indeed, for the most part, the endowments were out of tithes formerly belonging to religious houses, or out of chantry lands, given to the king in the first of his reign, according to the intent of the parliament therein; which was to convert them from superstitious uses unto more godly; as, in erecting grammar-schools, for the education of youth in virtue and godliness; for further augmenting the universities, and better provision for the poor. And the good king was so honest and just to lay them out, in a considerable measure, for these pious ends.—Strype, iii. p. 222.

A CATALOGUE OF KING EDWARD'S FREE GRAMMAR SCHOOLS.

Strype, iii. 461, et seq.

1550. A grant of a free grammar school at St. Edmund's Bury in Suffolk, liberally endowed with several lands of dissolved chantries. Bearing date an. 4^o regis.

A grant of a grammar school at Spillesby in Lincolnshire, and for Robert Latham, the first schoolmaster thereof for life: who shall have succession for ever, and be incorporated by the name of *Pædagogus Pædagogicæ de Spillesby*, of the king's foundation: and that he and his successors shall be able to take and purchase, and to give and grant, lands and tenements, &c., and to plead and be impleaded by that name: and that the said Latham and his successors shall have the parsonage of Spillesby for their mansion and the school-house, with three acres and a half of land there belonging to it, an annuity of 13*l.* 13*s.* 8*d.* out of the king's lands in Spillesby, payable quarterly; with a grant in it, that Katherine, Duchess of Suffolk, and Charles Brandon, and either of them, their heirs and assigns, shall have as well the nomination and appointment of the schoolmaster of the said school, as the visitation and reformation of the same. Dated in November.

A grant that there shall be a free grammar school in the parish.

of Chelmsford, in Essex; whereof Sir William Petre, Walter Mildmay, Henry Tirrel, Kts., and Thomas Mildmay, Esq., and their males of their bodies begotten, shall have the governance of all the possessions and goods, with a gift of all the chantry, called Hill's Chantry, with the appurtenances in Great Badow, in the said county: to the said governors, and their successors, for ever; with divers other lands and tenements, to the yearly value of 20*l.* 17*s.* 10*d.* besides 2*l.* yearly, paid to the poor people of Badow aforesaid. Paying yearly therefore at Michaelmas 17*s.* 10*d.* at the augmentation: and authority given to the said governors to appoint the schoolmaster and usher thereof, and to provide other necessaries for the said school, and to take the profits of the said lands; with a license to purchase of the king, or otherwise, lands, tenements, rectories, tenths, &c., to the yearly value of 20*l.* besides the premises. Dated in March.

1551. A grant unto the inhabitants of the town of Sedberg, in the county of York, that there shall be erected a free grammar school in Sedberg, to be called, 'King Edward the Sixth's Grammar School:' and that James Ducket, Richard Middleton, &c., be governors of the same; with a further grant unto the said inhabitants, and their successors, towards the sustentation of the said school, of the parsonage of Weston, in the county of York, with divers other lands, to the yearly value of 20*l.* 13*s.* 10*d.* Dated in April.

A grant to the inhabitants of the town of Loth (Louth), and their successors, that there shall be a free grammar school there, called 'King Edward's Free Grammar School;' and one guardian, and six assistants, of the same town, one schoolmaster, one usher; with a gift for the sustentation of the same, of 67 acres of land in Louth, in Lincolnshire; with divers other lands, &c., to the yearly value of 40*l.* Dated in September.

A grant to the bailiff, burgesses, and inhabitants of the town of Salop, that there shall be a free grammar school, and one master and usher to teach children. For the sustentation whereof the king gave them and their successors for ever all the tithes coming and growing of the towns, fields, and parishes of Astley, Sensaw, Cliff-Letton, and Almon-park, in the county of Salop. Dated in November. (But the patent sealed in February following.)

A grant to the bailiff and burgesses of the town of East Retford, in the county of Nottingham, that there shall be a grammar school there, which shall be called 'King Edward's Free Grammar School,' and a schoolmaster and usher. To the sustentation whereof he gave the late chantry of Sutton Loundale, in the parish of Lounde in the said county, to the yearly value of 15*l.* 5*s.* 3½*d.* Dated in November.

A free grammar school erected by the king, at Brymingham, (alias Bromycham,) in the county of Warwick, called 'King Edward the Sixth's Free Grammar School,' with a schoolmaster and usher. For the sustentation whereof he gave all that his barn, and four messuages lying in Dalend, in Birmingham, in the said

county, to the value of 21*l.* per annum, rendering to the king and his successors 20*s.* yearly at the augmentations.

A patent bearing date March 13, at the request of the Lord Dacres, granted to the bailiff and burgesses of Morpeth, in Northumberland, for the erecting of a school there, a schoolmaster and usher: with a gift of two chantries in Morpeth, with divers other lands, &c., yearly value 20*l.* 10*s.* 8*d.*, and a license of mortmain to purchase 20*l.* by the year, for maintenance thereof.

1552. Likewise the next year, viz. 1552, were erected grammar schools at Macclesfield, at Non-Eton, at Stourbridge, in Worcestershire. This last, by the grant, to be called 'King Edward's School;' and had a gift of all the yearly pensions and portions of tithes, of Markley and Suckley, in the same county; and divers other lands. Likewise there were other schools of his founding in the same year, at Bath and Bedford, and at Guilford. And in the last year of the king, viz. 1553, other schools, viz. at Grantham, at Thorne, and at Giggleswick.

(The foundations and endowments of these schools are given in Strype, vol. vi. p. 495, and we insert them here in order to render the list complete.)

A patent granted *per billam Dni. Regis* to the inhabitants of Macclesfield, in Cheshire; licensing them to erect a grammar school there, to be called 'King Edward's Grammar School.' And fourteen of the most substantial of the same town appointed to be governours of the possessions and goods to be given to the same school; who shall be a body corporate to purchase lands, either of the king, or any other. For the which intent, the king gave to the foresaid governours certain lands in the east part of Cheshire, and certain lands there, called the 'Prebends Lands,' late belonging to the college of John the Baptist, in the city of Chester; and at the chauntry, called the 'Peny Canon,' within the said city. With other land; which extended to the yearly value of 21*l.* 5*s.* Dated April 25, 1552. From the king's manour of East Greenwich.

A patent, dated May the 11th, to the inhabitants of the towne of Nonne Eton, in Warwickshire for the erection of a school there: with the gift of certain lands in the city of Coventree, belonging lately to the gilde of the Trinity in the said city, and of Corpus Christi there. Which said land were of the yearly value of 40*l.* 15*s.* 8*d.* To them and their successors for ever, to be held in socage; with a license of mortmain to purchase twenty pounds by the year.

The erection of a grammar school was granted by the king to the inhabitants of the town of Stourbridge, and parish of Old Swinford, in the county of Worcester. Endowing it with lands to the yearly value of 18*l.* 10*s.* 8*d.*, with a licence to purchase 20*l.* per ann. And to have the issues and profits of the same, from the feast of the *Annuntiation* last past. To be held of the manour of East Greenwich in socage.

The erection of a school was granted to the maior and citizens

of Bath, with the gift of certain lands, lying in the said city and suburbs of the same. Which he extended to the clear yearly value of 25*l.*; to them and their successors, for the rent of 10*l.*

A patent or licence was granted to the maior and burgesses of Bedford, to erect a free grammar school there; and to purchase lands to the value of fourty mark to that use. And that the president of Winchester college shal appoint the schoolmaster and usher.

A patent dated Jan. 27, to the maior and towne of Guilforde, in the county of Surrey; to erect a grammar school there. Whereunto the king gave one annuity of 6*l.* 13*s.* 4*d.* lately belonging to the chauntry of Stockaborn, in the county of Surrey; and one other yearly rent of 18*l.* 6*s.* 8*d.* coming out of two chauntries in Southwel, in the county of Nottingham. To be held to the maior and honest men of Guilford. And by the advice of the Marques of Northampton, keeper of the king's manour of Guilford, and of the keeper of the same for the time being: to name the schoolmaster and usher of the same school: and by the advice of the bishop of Winchester to make statutes and rules for the said school.

A patent dated March 28th, 1553, to the alderman and burgesses of Grantham, in the county of Lincoln: for the erection of a grammar school there: with the king's gift of certain lands there, to the value yearly of 14*l.* 3*s.* 3*d.* to have to them and their successors for ever. And to pay to the king and his successors, yearly, 16*s.* 8*d.*, to be held in free socage and burgage of the same town. And to allow to the schoolmaster, to be well instructed in the Latin and Greek tongues, 12*l.* per ann. And to make all statutes concerning the school, by the advice of Sir Will. Cecyl, Kt., secretary to the king, *durante vita*: and after his decease, with the advice of the bishop of the diocess; and after his decease, by the advice of the master of St. John's College, in Cambridge. And to purchase lands to the value of 10*l.* yearly, notwithstanding the statute of mortmain.

A gift of the church of Thorne in the county of York; dated May 21st. To stand for perpetuity, with all things therein, the ornaments, and gold and silver excepted. Being a corporation granted to divers persons, by the name of Wardens of the Church of Thorne. To purchase 20*l.* by year of the king, or any other person or persons, for the erection of a school.

A free school granted to the inhabitants of Gyggleswick, in Craven, in the county of York. Whereof John Nowel, clerk, vicar of Gyggleswick, William Cotterel, Henry Tenant, and others, were appointed governours: to make statutes and orders concerning the said school, with the assent of the bishop of the diocess. And the king gave certain lands, to the value of 20*l.* per annum. And also license to purchase other lands, to the value of 30*l.* per ann. (The patent bearing date May the 26th.)

A grant for the establishing of the corporation of the town of St. Alban's, in the county of Hertford, with certain liberties

therein mentioned ; and for the erection of a free grammar school there ; with a grant of the late abbey church to be their parish church. Dated in April.

A grant to Sir Andrew Jud, Kt., and alderman of London, that there shall be a free grammar school in Tunbridge, in Kent, called ' King Edward the Sixth's Grammar School,' with a schoolmaster and usher ; with a licence to the said Andrew Jud, to take lands and possessions for the sustentation of the same school. Dated in April.*

A free grammar school, granted to the mayor and burgesses of Southampton, with a schoolmaster and usher, and with a licence to take land to the yearly value of 40*l*. Dated in May.

A grant to the burgesses of Stratford-upon-Avon of a free grammar school and alms-house ; with a gift of certain lands, to the value yearly of 46*l*. 3*s*. 2½*d*. Dated in June. And this was the last this prince founded.

We may note that the endowments of these schools were for the most part out of the Chantry lands, given to the king in the first of his reign, according to the intent of the parliament therein, which was to convert them from superstitious uses into more godly, as in erecting grammar schools for the education of youth in virtue and godliness, for further augmenting the universities, and better provision for the poor. And the king was so honest and just to lay them out in a very considerable measure for these good ends intended.

In the year 1552, among other ' devices for religion,' was an order for,—

' A catechism to be set forth, to be taught in all grammar schools.' This the king thought very needful for the bringing up of youth in Christian principles and knowledge of true religion. And this he saw finished in his lifetime. A short catechism in Latin coming forth not long after this, by the king's authority ; Alexander Nowel, master of Westminster School, and prebendary of the church there, being the author thereof.—*Strype*, iii. 151.

This catechism is again noticed in the same year as follows :—

' A catechism for the instruction of children in the fundamentals of true religion passed the said synod ; but who was the author was not known in those days. Bishop Ridley was charged to be the author and publisher thereof, by Ward and Weston, in the disputation with him at Oxford ; who falsely also told him that Cranmer had said so but the day before. Ridley declared he was not, and that Cranmer would not say so. But he confessed that he saw the book, perused it after it was made, and noted many things for it ; and so consented to the book. Weston then told Ridley that he made him at the synod to subscribe it, being then a bishop, as he said, in his ruff. But Ridley replied, he compelled

* This is the free grammar school of Tunbridge, which is now very rich. A more particular account of this school will be given in the next Number.

no man to subscribe. Indeed, he set his hand to it: and so, he said, did Cránmer: and that then it was given to others of the convocation to set their hands, but without compulsion. Ward then would have framed an argument out of this catechism against Ridley, to prove that though Christ was ascended into heaven, yet he might be on earth; and so consequently in the sacrament; and then quoted a passage out of it, *Si visibiliter et in terris*, &c.

What I have to say more of this catechism is, that it seems to have been published in English as well as in Latin; that John Day printed it, and licensed to come abroad 1552. For, according to the Warrant Book, 'In September, 1552, a licence was granted to the same printer to print it both in Latin and English, the king having caused it to be set forth;' but it was not printed before 1553. And the reason it was so long before the licence and publication (half a year and more) I conjecture was, because it was thought fit to have the allowance first of the convocation, for the giving it the greater countenance and authority. It was certainly writ by Alexander Noel, as I find by comparing Noel's Catechism and this together. The Collocutores are in both catechisms the same, *viz.*, Magister and Auditor. And in many places the very same questions and answers are given *verbatim*; only Noel's Catechism, published under Queen Elizabeth, is larger much. In May, the next year, *viz.*, 1553, the council sent their letters abroad in behalf of this catechism, enjoining it to be taught to scholars, *as the ground and foundation of their learning*, as it is expressed in the Warrant Book.—*Strype*, iii. p. 194.

In 1553, appended to a proclamation requiring subscription to the articles, is the following order respecting the catechism, which, *Strype* adds, he 'concludes to be the Church Catechism, joined now ordinarily with our Common Prayer.'

'And where there is of late, by our authority, set forth a catechism for the instruction of young scholars in the fear of God and true knowledge of his holy religion, with express commandment from us to all schoolmasters to teach and instruct scholars the said catechism; making it the beginning and first (entry) of their teaching in the schools; our pleasure is, that for the better execution of our said commandment, you shall yearly (at the least) once visit, or cause to be visited, every school within your said diocese. In which visitation it shall be required, both how the schoolmaster of every such school hath used himself in the teaching of the said catechism, and also how the scholars do receive and follow the same: making plain and full certificate of the offenders contrary to this order, and of their several offences, to the archbishop of the province, within three months, from time to time, after every such offence. Given under our signet, at our manor of Greenwich, the 9th day of June, in the seventh year of our reign.'—*Strype*, iii. p. 281.

It was the king's pressing need, I suppose, that occasioned somewhat a severe commission to be issued forth this year (1552), not

only to take away out of churches all garments, and other utensils, used formerly in superstitious worship, but to take for the king's use all goods belonging to the churches that could be spared; and then, to be sure, little enough would be left. Now, in November, a letter was directed to ———, 'To take all certificates and returns of the late commission directed to divers countries, for the said survey of church goods, and to devise the best means for the bringing and converting to the king's use such goods as could be spared in the churches.' Among other things that came into the king's possession by virtue of this commission, was good store of linen, good and bad, as surplices, altar-cloths, towels, napkins, &c., used for the celebration of mass. These the bishop of London, as it seems, as much as was found in the churches of London or of his diocese, begged for the poor children of Christ's Church. And accordingly a letter came from the king and council to the bishop of London, to deliver to the governor of the hospital of Christ's Church in London such linen vestures and other linen cloth, not employed for the ministry in the said churches, as of the king's gift, for the poor orphans and other poor people.

The king was now selling away apace the rectories and advowsons of such churches as came into his hands by act of parliament, either from the monasteries, chantries, and free chapels, or by exchanges.—*Strype*, iii. 185.

The following was one of a numerous list of inquiries issued in 1547 to parsons, vicars, and curates :

Item, Whether they that have yearly to dispend in spiritual promotions an 100*l*. do not find competently one scholar in either University, or at some grammar school. And for as many hundred pounds as every one of them may dispend, so many scholars be found likewise. And what be their names. And they so found.—*Strype*, iii. 79.

MISCELLANEOUS.

FOREIGN.

FRANCE.

Banishment of the Patois from National Schools.—Guizot, having directed the attention of those at the head of public seminaries to the miserable jargon which was current in many of them, the committee of the district of Cahors appear to have been the first who have directed their serious attention to the subject. The order, which they have issued, would seem indeed to leave no room for doubt as to the necessity for their interference; and, as this order is otherwise full of striking points, we give it at length. "The committee," it observes, "being fully sensible of the fatal influence which the use of the Patois exercises over the pronunciation as well as the purity of the French language; considering, too, that the political and administrative unity of the kingdom imperiously requires the unity of the mother-tongue in all its parts, and that the southern dialects, to whatever respect they may be entitled as a bequest from our forefathers, have been unable to raise themselves to the rank of written languages; that they have likewise been unable to acquire any grammatical form, or to assume an orthographical shape; that they have not produced a single work of importance, and that their habitual use has been assigned by several minds of a high order as one of the principal causes of the literary superiority of the north over the south of France; considering also that these dialects, the variety of which is infinite, frequently aggravate the difficulties of judiciary proceedings, more especially in the instance of proceedings before the assize courts, when numbers of witnesses are under examination, have decreed the following, viz:—1. The Patois dialect is prohibited in all the national schools of the district of Cahors; the teachers are never to make use of it, and are rigidly to prevent their pupils from using it. 2. The inspectors, when they visit the schools, are to make a special report on this subject. 3. Such teachers as are guilty of violating this decree will be prosecuted and punished with the penalties which the law provides."

FRANCE AND BELGIUM.—For elementary education in France the budget assigns a sum of 900,000 francs, about 36,000*l.*; but in Belgium, the population of which is eight times less than that of France, the state appropriates 240,000 francs, about 9600*l.* for this purpose. In France there is 1 pupil in every 20 inhabitants, but in Belgium 1 in every 10: before the year 1830, the proportion in the country last-mentioned was 1 in 15. Belgium has altogether

twice as many children attending school, in comparison with France, and the number has increased fifty per cent. since the close of 1830.

New Dictionary.—The French academy having had the nature and form of their future philological labours under consideration, have determined, upon M. Villemain's report, to engage upon a great "*Historical Dictionary of the French Language*," in which every word is to be explained according to its etymology, its variations both in form and sense in the several ages of the language, the numerous shades of meaning which it has derived from the art of writing, and the most varied examples which can be adduced from the best writers. The collection and arrangement of the materials have been assigned to a special committee; but it is not possible to fix any term for the termination of this arduous undertaking.

THE UPPER ALPS.—The annual emigration of the male inhabitants of several valleys in this department forms no inconsiderable source of prosperity to the population at large. Upwards of four thousand porters, hedgers, herdsmen, hemp-combers, chimney-sweepers, &c., leave their homes at the commencement of winter, to seek a maintenance in distant departments, and return to their families in the spring with the fruits of their labour. But there is another species of employment which few would expect to meet with in the midst of the Alps; we mean that of *elementary teachers*. There are several villages which provide the whole department, and even the districts adjoining it, with excellent schoolmasters. A number of persons, with pens in their hats, are constantly seen at the various fairs. These are individuals in quest of hire, either as teachers, or as agricultural labourers, for a given number of months. They ask and receive the same wages in either capacity.

SWITZERLAND.

BASLE.—The maintenance of a university here has been definitively determined upon. After several days' animated discussion, the great council of the Canton approved, on the 9th of April last, not only of the bases laid down by the government for its re-organization in all its leading features, but extended it by voting the foundation of a fourth and additional chair of medicine. In conformity with the new arrangements adopted, which do not essentially differ from those under which the university has been hitherto conducted, the faculty of theology will consist of three ordinary professorships, that of jurisprudence of two, that of medicine of four, and that of philosophy of nine; forming eighteen in all. The expense of maintaining the university, inclusive of the pedagogium connected with it, is estimated at somewhat more than 2670*l.*, or 40,000 Swiss francs, of which the government will advance 2000*l.*

FREIBURG.—The building of the academy will soon be finished, and thus complete the very extensive scholastic establishment, on which the Jesuits have for years been intent. Even at this moment the appearance of the building in question, which stands on the highest ground in the place, has a magnificent effect. The delivery of lectures has already commenced in the academy, and they will hereafter include divinity, jurisprudence, and the various branches of philosophy. A museum, laboratory for chemical experiments, and an observatory, are among its intended appendages. The “college” contains the residences for the professors, a line of wretched cells, in comparison with the handsome lecture-rooms, and the apartments for lodging the pupils; next to them are the school-rooms attached to the “gymnasium,” where languages, history, geography, the mathematics and classics are taught. The boarders form part of the several classes in the gymnasium and academy; but have their special professors in the college itself, in which ample provision has been made in the way of chapels, halls for study, libraries, a musical saloon, a dining-hall, theatre, school for fencing and riding, &c. Nothing in short has been omitted which can tend to amuse and instruct. The number of pupils is so much on the increase, that they are said to amount already to nearly one thousand.—(Freiburg, 7th May).

ZÜRICH.—The seminary next in rank to our university is the *Cantonal School*, in which there are two separate departments, the “classical” and “technical.” It forms a gymnasium containing seven classes for classical instruction, a school for teaching handicrafts, and five classes for technical instruction. The university has two ordinary and two extraordinary professors in the faculty of theology, three ordinary professors in that of economy, three ordinary and two extraordinary professors in physic, and two ordinary and as many extraordinary professors in philosophy. The ordinary professors receive a salary of 120*l.* (1800 Swiss francs) a-year; and the extraordinary a salary of 53*l.* (800 Swiss francs) besides a fee of 16*s.* (12 francs) for a single, and of 32*s.* (24 francs) for a double, course of lectures. The attention of the government is, however, principally directed to the education of the lower classes: and what has long been greatly needed, the remuneration of the teachers in the elementary schools has been considerably increased. Nearly two hundred of those employed as village masters had not more than 3*l.* or 4*l.* (50 to 60 francs) per annum; but the new law secures to every teacher of more than 100 pupils a yearly allowance of 20*l.* or 22*l.* (300 to 325 francs) besides a gratuitous residence and certain perquisites; and a master of an auxiliary school (*filial schule*), who has the care of 50 pupils at the utmost, is to receive 13*l.* (200 francs) a-year or thereabouts.

LUCERN.—The number of National or elementary schools in this canton, the inhabitants of which are about 116,000, is 165, more than one-half of which are open in summer. Of secondary schools

there are sixteen. The town of Lucern, which has a population of 6000 souls, has five elementary schools for boys, as many for girls, four infant schools (*verwahr-schulen*), and two secondary schools for both sexes. The cantonal government is busily engaged in devising the means of improving all the scholastic establishments.

ITALY.

SICILY.—Ten periodical papers are published in Sicily. Of these seven appear at Palermo, two in Messina, and one in Catania; some of them indeed are of no inconsiderable merit. First on the list is the "*Corero*," a daily official paper. 2. The "*Effemeride scientifiche e letterarie*," &c., published at Palermo once a month, contain the transactions of the Royal Society of Emulation. 3. The "*Giornale di Scienze, Lettere, ed arti per la Sicilia*," also published at Palermo in monthly parts. 4. The "*Indagatore Siciliano*," from the Palermo press, the object of which is indicated by its title. 5. The "*Telegrafo Siciliano*," devoted to political novelties, short essays of a literary description, dramatic, and other passing occurrences. 6. "*Il Passetempo per le Donne*," a weekly publication for the boudoir and toilette, published at Palermo. 7. "*Il Vapore*," &c., appears at Palermo every ten days, and gives intelligence connected with the belles lettres and the fashions. 8. "*Il Giornale del Gabinetto Letterario dell' Accademia Givonia*," a monthly journal, printed at Catania, devoted exclusively to the liberal sciences and fine arts. 9. "*Lo Spettatore Zancleo*," which derives its title from Zankle, the ancient name of Messina, appears once a week, and contains literary disquisitions; and 10. "*Il Maurolico*," a ten days' paper, also published in Messina.

ROME.—A nephew of the present pope is expected here, who is to enter the principal theological college as a student. This is an innovation on former precedent: for no pontiff, we believe, has ever before allowed any member of his family to reside in the capital of the papal states.

The celebrated engraver, Bartholomeo Pinelli, who was a painter and sculptor as well as an engraver, died here at the close of last month, at the age of fifty-four. His funeral obsequies were of a splendid description: his body, after being embalmed, and exhibited to the public for several days, was borne to his parish church, attended by an immense concourse of his fellow-citizens, as well as a throng of native artists and foreigners bearing lighted torches, and a long array of students, who held branches of cypress in their hands. The coffin was embellished with rich draperies, and a volume of Dante's "*Paradise*," illustrated with engravings by Pinelli's hand, was laid upon it. It is intended to place a bust of him in the Capitol.

GERMANY.

Resolutions of the German Diet respecting Universities and other Scholastic Establishments in Germany.

Article 1. The several governments shall each of them establish a special board at their universities, for the purpose of taking cognisance of all matriculations; and the commissioner extraordinary, or some other individual, specially delegated by the government, shall assist at its proceedings. It is imperative, upon all students to send in their names to this board within two days after their arrival. No matriculations can take place after the expiration of eight days from the official commencement of the courses of lectures, unless permission be obtained from the public authorities appointed by the government for this purpose. Such permission will be specially granted in those cases where a student shall be able to give a satisfactory explanation of the causes which have occasioned the delay in sending in his name for matriculation. It is likewise required of all students who have already matriculated in any university, to give due notice at the beginning of each half-yearly session, and at the hours prescribed for matriculation, to the said special board, and to afford explanations with regard to their residence, &c. during the interval between each session.

Art. 2. A student who desires to matriculate must (1.), if he be about to commence his academical studies, lay before the board a certificate of his being possessed of such fitting scientific attainments, and of such a character for good conduct as are required by the laws of the state to which he belongs. Regulations shall be adopted in all cases where none regarding attainments or conduct have hitherto been prescribed. The several governments will interchange information on the laws which they may promulgate respecting these certificates, by laying them before the diet of the confederation.—(2.) If the student be passing from one university to another, he must not only produce a testimonial from the university which he has quitted, but from every other which he may have previously attended, in attestation of his diligence and good conduct;—(3.) And if he shall for a time have discontinued his academical studies, he must produce a certificate of conduct from the magistrates of the place in which he shall have longest resided during the preceding twelve months; the said certificate to contain a notification, that he has not attended any public seminary in the interval. No passport or private testimonial will be deemed sufficient; though some allowance may be made in this respect, with regard to such as come from places beyond the German borders;—(4.) In the case of all students, who are still under the control of fathers or guardians, a certificate, witnessed by the magistrates, and signed by the parents or guardians, must be produced, to the effect that the student is sent by them to the university, at which he is desirous of being entered. Such certificates, together with the student's passport, are to remain in the custody of the board of matriculation until he leaves the university. If these forms shall

have been duly observed, the student shall receive his usual matriculation; but the respective governments of the confederate states will take the necessary steps, that such matriculation shall nowhere be recognised as a substitute for a passport.

Art. 3. In every certificate of conduct, mention is to be made of any punishment which may have been inflicted, and of the grounds on which it was inflicted: particularly in those cases where it has been so inflicted on account of connexion with interdicted clubs or associations. The mention of punishments incurred for other misdemeanours, not of an aggravated character, may be wholly omitted, or else referred to in general terms, accordingly as the authorities may judge it expedient. In every certificate it must be stated, whether the party has or has not rendered himself obnoxious to the suspicion of having been connected with an interdicted club or association; and the grounds of such suspicion must, if possible, be assigned. It is incumbent upon every student to have his certificates in readiness, that he may be prepared to submit them at once when he seeks to matriculate, and it is incumbent upon the proper authorities to grant them without improper delay, in case no grounds of refusal exist; and if such grounds exist, they must be certified on requisition being made to that effect by the student. If this be refused, he may have recourse to a superior authority. In case a student, on requiring to be matriculated, is not able to furnish the requisite testimonials, but promises to submit them afterwards, he may, if the board of matriculation shall think fit, be bound to observe all academical laws, without being matriculated in the first instance, and be admitted to attend the courses of lectures; but the university shall forthwith communicate with the authorities on whom it devolves to grant such testimonials or attest them, and the said authorities are required to forward them without delay.

Art. 4. Matriculation is to be *refused*.—1. If a student be too late in making application, and cannot assign satisfactory reasons for the delay (Art. 1.);—2. If he be not in a situation to submit the testimonials required from him: if, upon application made on the part of the university, no answer be received within four weeks at the utmost, dating from the day on which such application was despatched, or if the granting of a certificate be refused, (Art. 2. and 3.) be the reasons what they may, the party shall be required to quit the university forthwith, unless the government shall see special reasons to allow him to attend the courses for a definite period, under the restrictions contained in the foregoing article. But this shall not deprive him of the right to present himself again for matriculation, if he shall afterwards obtain the requisite testimonials;—3. If the party coming from another university shall have been relegated from it in virtue of a '*consilium abeundi*.' A student of this description shall be allowed to re-enter a university, only where the executive of the university shall permit it, after previous understanding, through the competent authority, with the executive of the university, which has so relegated

the student: but before he can be admitted, the consent of the government of the country, of which he is the subject, must be obtained;—and 4. If there be good grounds for suspecting, that the student is member of an interdicted association, and if he cannot satisfactorily exonerate himself from such suspicion. The commissioners of the respective governments shall take due care, that the several universities interchange information with regard to every student who shall be expelled, stating the reasons for his expulsion, and giving a description of his person; they shall at the same time give due notice thereof, to the parent or guardian of the party so expelled.

Art. 5. Previously to matriculation, there shall be delivered to every student a literal copy of the conditions contained in the 3rd and 4th clauses of the resolution passed by the Diet on the 20th September, 1819; which clauses have reference to the measures to be adopted in the case of universities, as also a copy of the conditions laid down in the following article, the same being to this effect:—‘I, the undersigned, promise under my hand herewith subscribed, upon my honour and without moral reservation, 1. That I will not take part in any forbidden or unlawful association of students, particularly in any Burschenschaft union, under whatever name they may be established; that I will not connect myself with such associations in the remotest degree, and that I will not in any way promote them; and 2. That I will not unite with others for this purpose, by entering into secret deliberations on the existing laws and institutions of the country, nor will I seek to raise actual resistance against the measures of any public authority in conjunction with others. And I declare myself bound in a peculiar manner, to fulfil at all times what is required of me by the enactments contained in the preceding part of this paper; whilst, on the other hand, I pledge myself to submit unresistingly to all the penalties and injurious consequences which they pronounce against those who violate them.’ The matriculation can on no account take place until the student has subscribed the foregoing declaration. If any student refuse to subscribe it, he shall be immediately sent away from the university whatever he may urge.

Art. 6. Associations of students for scientific or social purposes may be allowed with the sanction of the government and under such conditions as it may prescribe. All other associations of students, whether among themselves or in connexion with any secret union of whatever description, are to be considered as illegal.

Art. 7. The participating in unlawful associations shall subject the offender to the following degrees of punishment, which shall not however supersede such severer enactments as may exist in any of the respective states;—1. The founders of any unlawful association, and all those who shall seduce, or shall have attempted to seduce others to join it, shall not undergo imprisonment alone, but shall in every case be punished with a ‘*consilium abeundi*,’ or with rustication (*relegation*), the severity of which shall be deter-

mined by the circumstances of the case;—2. The other members of such association shall be punished with severe imprisonment; but where repeated or continued participation shall have taken place, or where the offence has been preceded by previous punishment for taking part in unlawful associations, or where other grounds exist for aggravation of punishment, the penalty shall be a threat by actual signing of a ‘*consilium abeundi*,’ or by infliction of the ‘*consilium abeundi*’ itself; or, where the circumstances of the case are extremely aggravated, expulsion or relegation of a more or less severe character shall ensue;—3. But in so far as there shall have been any connexion with students of another university, in furtherance of unlawful associations, by exchange of letters or intervention of deputies, all such members as shall have taken an active part in this connexion, shall be punished with rustication;—4. Such individuals likewise as have been active in promoting such a connexion, even though they may not be members of the association, shall, as the circumstances of the case require, be punished with some one or other of the degrees of punishment laid down in the foregoing clauses;—5. The party so punished for participating in unlawful associations shall, according to circumstances, forfeit all benefits of an academic nature, which he may derive from public funds and endowments, towns, ecclesiastical registries, and the like, or the enjoyment of which may be dependent upon the will of the public authorities, or any other source whatsoever. In like manner, he shall forfeit any exemption, which he may heretofore have enjoyed, from the payment of fees to lectures;—6. Any student punished with the ‘*consilium abeundi*’ for taking part in unlawful associations, shall be refused the testimonial required by § 3. of Art. 4. in order to his being re-admitted into a university for the space of six months, and any student, who shall have been punished with rustication, shall be deprived of it for the space of twelve months. If, however, either of these punishments shall apply partly to the cases of unlawful associations, or partly to other offences, and the offence connected with participating in such associations, shall not be so aggravated as to necessitate expulsion, the intervals of time hereinbefore set down may be diminished one half;—7. In the case of all offences committed by students, the academical laws of the state concerned, shall provide for inquiry into the existence of any indications tending to show that such offences have originated in consequence of immediate or remote connexion with unlawful associations. If such connexion be proved, the circumstance shall be charged in aggravation;—8. The respective governments will at no time grant any prayer for the recal of the punishment of expulsion from a university after the expiration of the period hereinbefore stipulated; nor in cases where a pardon may be granted, shall such pardon be granted if the petitioner is not in a situation to show that he has employed the period of his expulsion in a useful manner, and has used his best endeavours to conduct himself irreproachably, and if he is charged, on credible testimony, with having taken part in unlawful associations.

Art. 8. The members of a Burschenschaft, or of any other interdicted union having political objects in view, under whatsoever names they may be known, shall, without any reference to other penalties under the criminal laws, be punished with a more rigid rustication than customary. Those, who shall in future be so punished for such offence, shall not be admitted either into the civil service, or to any ecclesiastical or scholastic office, or to any academical dignity, or to the bar, or to practise as physicians or surgeons, within the states of the German Confederation. If any government, moved by special reasons, shall in its mercy mitigate or forego the punishment incurred by any one of its subjects, on account of his participation in any of the associations here designated, such mitigation or foregoing of punishment shall in no case take place, without the government shall have maturely considered the whole circumstances of the case, shall have convinced itself that the misdeed individual has withdrawn from every unlawful association, and shall have ordered him to be kept under requisite surveillance.

Art. 9. The respective governments will take measures in all cases where political associations among the students shall be discovered in a university, to acquaint all other universities therewith.

Art. 10. In the cases of all offences entailing academical punishments, no suspension of the penalties entailed under the criminal laws according to the degree of the offence, shall take place, but such penalties shall be specially kept in reserve in all cases, when the objects contemplated by any association of students, or the acts arising out of such associations, shall render the application of severer penal laws necessary.

Art. 11. Whatever individual shall either directly or indirectly undertake to publish a denunciation (*Verufserklaerung*) against a university, or an institution, or a public authority, or an academical teacher, shall be excluded from every German university, and such exclusion shall be made public. Those, who premeditatedly lend assistance to the promulgating of such denunciations, shall, according to the gravity of the circumstances, be punished with the 'consilium abeundi,' or with rustication, and such steps shall be taken with regard to their admission into other universities as are prescribed by § 6. of Art. 7. The same penalties, as attach to the promoters of the aforesaid denunciations, shall attach to students who circulate denunciations against private individuals, or take part in them. It is left to the legislature of the country to determine how far such denunciations are otherwise to be deemed private wrongs.

Art. 12. Whatever individual has studied at a university, and is desirous of entering the public service, is required upon quitting such university to provide himself with a certificate of the lectures which he has attended, of his assiduity, and of his deportment. Unless he produces such a certificate, no individual will be admitted to examination in any state of the Confederation, nor receive

an appointment in the public service of such state. The respective governments will adopt regulations to the effect that such certificates shall afford as accurate and decided a character as possible of the student, &c.: and these certificates shall, in an especial manner, have reference to the point of participation in unlawful associations. The parties specially appointed by the said governments shall be instructed to use all due care that this regulation is conscientiously carried into effect.

Art. 13. The academical authorities (*Gremien*), in so far as the administering of penal justice has been hitherto vested in them, are every where released from the cognizance of criminal and general police affairs with respect to students. The designation and composition of the authorities, in whom jurisdiction in these matters shall hereafter be vested, are left in the discretion of the respective governments. But the foregoing enactment shall not be construed to affect simple points of discipline, exclusively relating to students, such as superintendence of their studies and conduct, and enforcement of academical statutes, or imposition of purely academical punishments.

Art. 14. The regulations contained in the Articles 1 to 12, shall have effect as an obligatory compact for six years to come, with the reservation of further provisions in case experience shall, in the interval, show that further promotions are expedient.

Art. 15. The Articles 1 to 12, shall likewise be applied to other public, as well as private establishments for education, so far as may be consistent with their nature. The respective governments will also adopt the most effectual means to put down to the utmost the spirit of association, in so much as it may possess a political tendency, and with this view particular care will be had to extend the provisions of § 2. of the resolution passed by the Diet on the 20th September, 1819, to private establishments.

The German Universities.—It is stated in a work, printed for private circulation and entitled “The Wants and Resources of the University of Leipzig,” that “the annual grant from the public treasury to the university of *Bonn* is 90,000 dollars, about 12,375*l.*; to that of *Breslau*, 70,000 dollars, about 9625*l.*; to that of *Halle*, 69,000 dollars, about 9487*l.*; to that of *Königsberg*, 65,000 dollars, about 8937*l.*; and to that of *Greifswalde*, 53,000 dollars, about 7287*l.* These five universities, therefore, are supported by the Prussian state at an annual expense of about 47,700*l.* The yearly cost of the university of *Göttingen* to the Hanoverian government is 80,000 dollars, about 11,000*l.*; and that of *Heidelberg*, to the Grand Duchy of Baden, 40,000 florins, about 3830*l.*” Würtemberg, on the other hand, appropriates only 50,000 florins, or about 4790*l.*, to the university of *Tübingen*, which is attended by upwards of 730 students, while it spends 75,000 florins, nearly 7200*l.*, on the rearing of horses.

The celebrated Greek philologist, Dr. Augustus Matthiæ, coun-

cillor of education and ecclesiastical affairs to the Duke of Saxe-Altenburg, died at Altenburg on the 6th of January last. He had been the director of the gymnasium in that town ever since the year 1802, and in this capacity entitled himself to public esteem as much as by his labours in Greek archæology and literature. He was born at Göttingen on the 25th of December, 1769, and consequently died in his sixty-seventh year. His productions were numerous, and not only passed through many editions in his native country, but were mostly translated into foreign languages. We may enumerate among them his "Outlines of the History of Greek and Roman Literature," which reached a third edition in 1831, and were translated into Danish in 1824. His "Manual of the Elements of Philosophy," also passed through a third edition in 1833, and was translated into Italian in 1834; his "Comprehensive Greek Grammar," of which a third edition is now in the press, has been translated into English, French, and Italian. A collection of his "Miscellaneous works in the Latin and German tongues," was edited by himself in 1833. He resided as a private tutor at Amsterdam from 1789 to 1797, and whilst there, wrote an Essay (to which the trustees of the Stolpe legacy in Leyden awarded a prize in 1797,) under the title of an "Inquiry into the causes of the varieties in national characters." This essay was published at Leipzig in 1802.

PRUSSIA.

A very considerable alteration is going to be made in the conduct both of the schools and universities of this kingdom. No teacher is to receive an appointment, either in the elementary or middle schools, unless he has been educated in a pedagogic seminary, and unless his character is perfectly free from suspicion, in a religious and political point of view; with regard to politics a similar degree of caution is to be observed in the appointment of every teacher in a gymnasium; and strict regulations are to be laid down for the observance of all teachers, with reference to their exposition of political opinions in the present times of change and love of novelty. It is also intended to prescribe the use of particular works in every branch of learning and science throughout the Prussian schools. At the close of every academic year, students are to undergo examination, and upon passing their third examination they are at once to be admitted candidates for degrees, &c.

BONN.—The number of students in attendance during the present half-year is 832; forty-two less than in the preceding half-year. They consist of 97, matriculated for Protestant theology, 180 for Roman Catholic Theology, 156 for medicine and surgery, and 118 for philosophy and rural economy, &c., besides 265 for jurisprudence, and 16 who have not matriculated; 710 of them are Prussian subjects.

FREIBURG.—During the late winter session the number of students has amounted to 445; as compared with the previous session there has therefore been an increase of 11, but the proportions, as respects the various faculties, have undergone a change. There has been a visible increase in the number of medical students, but a decrease in the theological and philosophical. In law there has been a slight increase. But on comparing the present session with the winter session 1833-34, there will be found to be a diminution of 45 in the number of students. Their conduct at the present moment is in every respect praiseworthy; they were never more distinguished for assiduity and correct deportment.

LEIPZIG.—The school for practical knowledge (*Realschule*), which was opened last year in connexion with the general civic school, succeeds extremely well. The object of this establishment is a solid and scientific preparation for the several branches of mercantile life and the superior avocations of civil life, which do not call for a classical education. It requires, as a preliminary on the pupil's part a sound and complete elementary education, and does not therefore admit any youth under eleven or twelve years of age. The prescribed course is of four years' duration, and the school is divided for this purpose into four classes. The subjects of instruction in it are, religion, the mathematics (inclusive of commercial arithmetic), the natural sciences (which extend to natural history, experimental philosophy, and chemistry with special reference to the arts and manufactures, &c.) geography, history, the German, French, and English languages, writing and drawing; the number of hours devoted to instruction is thirty-eight per week. Certain extra hours are also set apart for those who are desirous of learning Latin and Italian. The amount of fees paid by each pupil is from 75s. to 90s. (25 to 30 dollars) per annum. The sons of strangers and foreigners are, if desired, placed in approved boarding houses by the director of the school, (Dr. Vogel).

JENA.—The number of students at this university, between Easter and Michaelmas last year, was 441, of whom 99 left it at Michaelmas. The number of admissions between Michaelmas and Easter of the present year has been 98 in all, viz. to divinity 39, to law 25, to medicine 24, and to philosophy and pharmacy, 10. The number at this moment, therefore, is 440, of whom 277 are native-born subjects of the Grand Duchy of Weimar and 163 are from foreign parts. The professors and lecturers are 63 in number; namely 12 in the faculty of theology, 15 in law, 11 in medicine, and 25 in philosophy.

WÜRZBURG.—It is intended that all candidates for divinity at this university as well as Munich shall in future study the Hebrew language, which has always been insisted upon at the Protestant university of Erlangen. It is also under contemplation to require

the senates in the three universities to keep a watchful eye over the moral conduct of the students; a point on the subject of which the most deplorable indifference has hitherto been exhibited. The lecturers too, in order to render their lectures still more useful to the student, are to examine their classes after lecture and require the students to discuss the topics which have been brought before them, previously to leaving the lecture-room.

AUSTRIA.

Special Seminaries.—The “Polytechnic Institute” at Vienna, which has been brought into operation at an expense of 500,000 florins at least, (or about 48,000*l.*), is under the immediate direction of 35 professors and teachers, and is attended by 747 pupils, of whom 265 study in the ‘*Realschule*’ or school of practical knowledge, 87 in the commercial department, and 395 in the technical school. There is a “Public Technical Institute” at Prague, which is conducted by a director and sub-director, 4 professors, an adjunct master, (*lehramtadjunkt*), and several teachers of mechanical science; it is attended by nearly 400 youths. The “Joanneum,” a public technical-academy at Grätz, is under the superintendence of a director and 4 professors, who give instruction to about 250 pupils in every branch of natural history and experimental philosophy connected with mechanics and agriculture. The “Imperial Institution for sciences appertaining to the management of woods and forests, and to education,” which is established at Maria-Brunn in Lower Austria, is conducted by a director, 4 masters and assistants, and provides board and lodging as well as instruction for 66 pupils. It is under the superintendence of the Master of the Woods and Chaces to the Emperor of Austria.

PESTH.—The number of students entered during the present scholastic year has been 1510, of whom 72 are studying divinity, 194 jurisprudence, 835 medicine, and 409 philosophy. Among them are 1015 Roman Catholics, 7 Græco-Catholics, 83 of the Greek faith, 101 Lutherans, and 93 reformed Lutherans. The pupils in surgery amount to 350.

The late Emperor Francis.—The Emperor passed no inconsiderable portion of the day in his private library, which is distinct from the extensive public library in the Burg, and was reserved for his own private use. Its contents are estimated at between 30,000 and 40,000 volumes. The library immediately adjoined the apartments in which he resided, and it was his regular custom to spend some time in it during the forenoon, before state concerns called him away, as well as such intervals as he could snatch during the remainder of the day. The principal part of the library consists of works in natural history and botany, which were his favourite study, and no library in Europe probably is richer in these branches of science. It was rarely shown to strangers; but the emperor, almost to the last hour of his life, devoted much attention to its

increase. He was the founder of the splendid edifice in which the Polytechnic Institute at Vienna is established, and laid the foundation stone in person on the 14th October, 1816. He speaks of this institution, in the deed of endowment, as "a monument of his earnest desire to diffuse learning and science among all classes in the Austrian dominions, and particularly of his anxiety to promote the social education of his faithful subjects of the middle classes (*Bürgerstandes*). In testimony of which he had laid the foundation stone with his own hand." The comprehensiveness and admirable arrangement of the various collections attached to this institution are deserving of imitation in similar establishments. The emperor had a private botanic garden, close to the Burg, which was furnished with conservatories, and supplied with the rarest exotics. Here too he passed many hours in the course of the week, observed a strict incognito, and was fond of employing himself in horticultural pursuits and manual labours.

RUSSIA.

ST. PETERSBURG.—*Hospital for Children*.—Sick children had been hitherto consigned to the hospitals, in which they were liable to be neglected, and into which those below a certain age could not be admitted. Several benevolent persons, therefore, united and proposed the establishment of a Children's Hospital, which was ultimately opened, under imperial sanction, on the 6th of December last. Its object is to take charge of children labouring under contagious diseases or other bodily affliction, provided there is the remotest prospect of a cure being effected. With this view 56 beds have been prepared, and children are admitted between the age of five and fourteen; the poor without any expense, but the children of serfs upon payment of a fee of about fourteen shillings. Parents are allowed to bring their sick children at stated hours, and are placed in a room, where advice, prescriptions, and medicines are given to them gratuitously. If the child is in too dangerous a state to be removed into the hospital, a medical practitioner is sent to visit the patient at the expense of the institution. The hospital consists of a range of clean and cheerful apartments, divided off for the separate accommodation of boys and girls. Each apartment will contain from five to ten children, who are distributed in such a way, that those afflicted with contagious diseases are kept distinct from the others. Baths and tubs are attached to each set of rooms: the beds are of iron, the mattresses stuffed with hair, the linen is of good quality, kept clean, and frequently changed; every child is supplied with a bed-gown of green flannel; the boys wear a cap, and the girls a hood. The victuals are of good and wholesome quality, and a small garden is open for the use of convalescents. The director is a physician of eminence, and he is assisted by four of his profession, three of whom attend twenty-four hours at a time in rotation, while the fourth takes charge of the outdoor patients: the nurses are principally selected from the Orphan Asylum, and the general superintendence is undertaken by females

of mature age. Between the 6th December and 6th February last 95 children have been admitted into this excellent establishment ; 38 of them have been cured, 5 have died, and 52 remained under its roof. The number of out-door patients was 211. Many owe their lives to the early attention here paid to them, and numbers of families have been rescued from the frightful effects of contagious diseases by the removal of their younger members to this hospital. Another of the benefits derived from it has been the exchange which the children themselves have made, under its regulations, of uncleanly and disorderly habits for habits of order and cleanliness. The youngest among them are allowed toys, and the elder have elementary books of a light description put in their hands. Convalescents are allowed all kinds of innocent recreations. The institution is wholly supported by charitable contributions, and its effects can scarcely fail to be most advantageously felt in a town, where a fifth part of the children born are carried off for want of medical aid as well as from the dreadful spread of contagious disease.

JAPAN.—Toleration.—The religious faith of the Japanese, according to the 'Illustrations of Japan' recently published by Mr. Meylan, the head of the Dutch Factory on that island, ranges under two leading divisions,—the Sintoo and the Boudso. The first is a sect which has existed from time immemorial, and the second, which has the greatest vogue in the present day, abounds in a variety of tenets and rites, the growth of other countries. Meylan himself makes it a compound of the Brahminical doctrines of Xaca and the Chinese forms of belief and worship as established by Confucius. "You will never see the Japanese," says Meylan, "disputing about religious topics ; much less does religious hatred ever find a place in their breasts. Nay, they even look upon it as a proof of good breeding to pay occasional visits to the Deities of a different sect from their own and to worship them. Whilst the Koubo or temporal Emperor, for instance, despatches a mission to the Temple of the Sintoo at Tsie, for the purpose of offering up prayers on his behalf to the invisible god, he, on the other hand, appropriates funds for building places of worship in honour of Confucius ; and the Dairi, or spiritual emperor, allows the uncouth divinities of the Siamese or Chinese, to keep company in the same sacred shrines with the Japanese deities, by way of edifying such persons as are desirous of rendering them homage. If I am asked the cause, in which this extreme degree of toleration has originated, my answer is, that the adherents of the different religious sects in Japan acknowledge but one and the same supreme head, namely the Dairi or spiritual emperor, and pay him constant obedience. As descending in direct line from God, and as his representative on earth, he is himself the object of public veneration ; and, in this capacity, extends his protecting arm indiscriminately to every varied form of faith, however discordant they may be with regard to tenets and rites."

Social System.—The great characteristic of political society in Japan is that every appointment and profession is hereditary, whence the absence of all those moving impulses to individual ambition, which animate and convulse society in Europe. The population of the country is divided into eight classes, viz. The reigning princes or governors,—the nobility,—priesthood,—military,—civil officers,—merchants,—artisans,—and labourers. There is one solitary profession, which seems, like the *Pariahs* of India, to form a caste beyond the pale of society; and this is the profession of a tanner. All intercourse with tanners is avoided as well as forbidden, and they supply the public with executioners. . . The Japanese female enjoys scarcely less freedom than the European, is the presiding deity at all festivals, and is the ornament of social life. The *samsie* or guitar is to the younger branches of the gentle sex what the piano-forte is to our unmarried countrywomen, and there are but few who neglect to acquire the art of playing upon it.—According to M. Meylan, agriculture and manufactures are in as advanced a state in Japan as in any Eastern country. Telescopes, thermometers, watches, and clocks of excellent quality, are made at Nagasatei. A clock, which he describes, was five feet in length and three in breadth; it was embellished with a landscape of neatly varied features, and a golden sun; when striking the hour, a bird flapped its wings, a mouse emerged from a hole and climbed a hill, while a tortoise crept slowly along for the purpose of marking the hour on the face.

BRITISH.

OXFORD, *April 14.*—The Hertford University scholarship, for the greatest proficiency in the Latin language, has been adjudged to Mr. John Ernest Bode, student of Christ Church.

May 20.—Some months ago, a proposition was under discussion among the heads of houses as to the propriety of substituting for the subscription to the thirty-nine articles at matriculation, a declaration, which was in fact to be precisely to the same effect, but divested of the ambiguity which was supposed to attend the act of subscription, and to obviate the necessity of those qualifications and explanations which were usually given when the party subscribing to all the dogmas in the formula alluded to was a youth (on an average between sixteen and eighteen years of age) who could not be supposed much acquainted with the various points enumerated in the articles. The declaration, it was understood, was to be in no degree more or less strict and exclusive than the subscription, but simply *equivalent*, without being ambiguous. It was accordingly imagined that but little difference of opinion would exist on the subject, as it involved no question of greater or less liberality—as it retained every principle of exclusion—as it differed from the existing practice solely in stating its meaning explicitly, in declaring avowedly what the other did by tacit implication—as it merely

required a general assent and conformity, where the subscription could in fact be understood to do nothing more; on these grounds it was supposed that it would meet with little opposition. The matter having been duly and maturely considered by the heads, it was notified that on Wednesday, May 20, a convocation would be held to propose the following declaration in lieu of subscription to the thirty-nine articles at matriculation:—"I declare that I do, so far as my knowledge extends, assent to the doctrines of the United Church of England and Ireland, as set forth in her thirty-nine articles; that I will conform to her liturgy and discipline; and that I am ready and willing to be instructed in her articles of religion, as required by the statutes of this university." Those, however, who calculated on a quiet change in an immaterial point of form were entirely disappointed. No sooner was the proposition notified, than hosts of pamphlets and printed sheets were flying in all directions about Oxford, intimating that in the opinion of the writers the proposed change would strike a deadly blow at the vitals of the Church. Replies and counter-replies without number issued from the press; and it was really instructive to see the whole talent and learning of the first university in England employed in such worthy and profound topics as the difference between "signature" and "declaration"—the distinction between "acquiescence in the articles," and "conformity to the Church"—the definition of "belief," as distinguished from "knowledge," &c. &c. It was, however, made a violent party question. The high-churchmen opposed all innovation, even though it made practically no change. It was something new—it was an alteration in what has subsisted almost three centuries. Among those who supported the change were some known to be favorable to more liberal views: the whole measure *therefore* was pregnant with danger; and a declaration, in fact, more strict and limited, more precise and exclusive in its terms than subscription itself, was decried as a *liberal* measure, as opening the door to latitudinarianism, and was denounced as having Socinianism at the bottom of it. We have no space nor inclination to say more of the gross absurdities and frivolous puerilities which have distinguished both parties in this notable controversy. The matter was duly brought forward in convocation this day, and the declaration thrown out by 459 to 57 votes.

June 4.—The names of those candidates who at the examination in the present Easter Term, were admitted by the public examiners into the four classes of *Literæ Humaniores*, according to the alphabetical arrangement in each class prescribed by the statute, stand as follows:—

FIRST CLASS.—Adams John, student of Christ Church, Craven scholar, 1830, Ireland scholar, 1833; Cardwell, Edward, scholar of Balliol College; Chaffers, Thomas, commoner of Brasenose College; Giles, John Edward, commoner and Lusby scholar of Magdalen Hall; Ley, William Henry, scholar of Trinity College; Sheppard, Henry, scholar of Worcester College.

SECOND CLASS.—Andrews, William, commoner of Queen's College; Argles, Marsham, postmaster of Merton College; Barne, Henry, scholar of Exeter College Bridges, Brook Edward, com-

moner of Oriel College; Brome, Viscount, New College; Campbell, Andrew Ramsay, commoner of Balliol College; Cockin, William, scholar of Brasenose College; Gilbard, William, commoner of Worcester College; Hulton, Campbell B. A. G., commoner of Brasenose College; Kynnersley, Edmund C. Sneyd, commoner of Trinity College; Pearson, William Henley, commoner of Christ Church; Scott, William, scholar of Queen's College; Tate, Charles Richmond, scholar of Corpus Christi College.

THIRD CLASS.—Austin, John Southgate, commoner of Trinity College; Ball, Edward, commoner of Brasenose college; Blackford, Fitzroy, commoner of Brasenose College; Daniel, John, commoner of Christ Church; Daubeney George Barnston, commoner of Balliol College; Dyke, William, scholar of Jesus College; Fitzgerald, Augustus Otway, commoner of Balliol College; Gordon, Edward, clerk of Oriel College; Hardy, Robert, commoner of Balliol College; Higgs, Richard William, fellow of St. John's College; Hodgson, John Fisher, commoner of Christ Church; Knight, George, commoner of St. Edmund Hall; Knight, Horace Lewis, commoner of Christ Church; Lloyd, Alfred, scholar of Wadham College; Onslow, Augustus Cranley, commoner of Christ Church; Reade, Charles, demy of Magdalen College; Rowley, William Walter, commoner of Queen's College; Soltau, William Francis, commoner of Balliol College; Treacy, Joshua, scholar of Queen's College; Wells, Francis Ballard, demy of Magdalen College; Wingfield, William Frederick, commoner of Christ Church; Winter, Alfred Litt, commoner of University College.

FOURTH CLASS.—Addison, John Dupre, commoner of Exeter College; Bridges, Alexander Henry, commoner of Oriel College; Colborne, William Nicolas Ridley, gentleman commoner of Christ Church; Harris, Hon. Charles A., commoner of Oriel College; Hocker Charles, commoner of Exeter College; Hunter, William, fellow of St. John's College; Hussey, William Law, student of Christ Church; Martin, Francis Pitney Brouncker, gentleman commoner of Wadham College; Newton, Francis Wheat, commoner of Pembroke College; Price, John, scholar of Jesus College; Severn, John Percy, gentleman commoner of Christ Church; Sinclair, William, gentleman commoner of St. Mary Hall; Slater, Leonard, commoner of University College; Sterling, Charles James, gentleman commoner of St. Mary Hall.

The number of those who passed their examination, but who were not placed in any of the classes, was 108.

June 9.—The theological prize for 1835, on the following subject—'The death of Christ was a propitiatory sacrifice, and a vicarious atonement for the sins of mankind,' has been awarded to Mr. John Cowley Fisher, B.A., of Queen's College.

June 16.—The Chancellor's prizes for the present year have been this day adjudged to the following gentlemen:—

Latin Verse, 'Julianus Imperator Templum Hierosolymitanum instaurare aggreditur,' James Cowles Pritchard, Scholar of Trinity.

English Essay, 'The influence of ancient oracles on public and private life,' James Bowling Mozley, B.A. of Oriel.

Latin Essay, 'De Jure Clientelæ apud Romanos,' Roundell Palmer, B.A., Probationer, Fellow of Magdalen; Ireland and Eldon Scholar, and late Scholar of Trinity.

Sir Roger Newdigate's prize for the best composition in English verse, 'The Burning of Moscow,' William Robert Seymour Fitzgerald, Commoner of Oriel.

June 19.—Candidates admitted into the four classes in *Disciplinis Mathematicis et Physicis* :—

Class I. John Adams, Christ Church; William C. Buller, Oriel; Edward Cardwell, Balliol; William J. Phelps, Oriel.

Class II. Hon. Charles A. Harris, Oriel.

Class III. Charles Richmond Tate, Corpus Christi.

Class IV. Edward Grimes, Oriel; Thomas Holme, Queen's; Dunckly Thomas, Exeter; John Williams, Jesus; George A. Wright, Winchester.

Examiners, R. Walker, G. R. Browell, G. H. S. Johnson.

June 23.—THEOLOGICAL PRIZE FOR 1836:—*The Evidences of our Saviour's Resurrection*.—The subject above stated, as appointed by the judges for an English Essay, is proposed to the Members of the University on the following conditions; viz.

I. The candidate must have passed his examination for the degree of B.A. or B.C.L.

II. He must not on this day (June 23) have exceeded his twenty-eighth term.

III. He must have commenced his sixteenth, eight weeks previous to the day appointed for sending in his Essay to the Registrar of the University.

In every case the terms are to be computed from the matriculation inclusively.

The Essays are to be sent under a sealed cover to the Registrar of the University, on or before the Wednesday in Easter week next ensuing. None will be received after that day.

The candidate is desired to conceal his name, and to distinguish his composition by what motto he pleases; sending at the same time his name sealed up under another cover, with the motto inscribed upon it.

The Essay to which the prize shall have been adjudged, will be read before the University in the Divinity School on some day in the week next before the Commemoration; and it is expected that no Essay will be sent in which exceeds the ordinary length of recitation.

June 24.—Lord Radnor having introduced on the 11th of June into the House of Lords a Bill 'prohibiting Subscription to the Thirty-Nine Articles in certain cases,' it was agreed in a convocation by a majority of 91 to 4, that the University Seal should be affixed to the following petition against the said Bill :—

'To the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland, in Parliament assembled,

'The humble petition of the Chancellor, Masters, and Scholars, of the University of Oxford,

'Showeth—That your petitioners have learned that a bill, intituled "An Act prohibiting Subscription to the Thirty-Nine Articles in certain cases," has been introduced into your Lordships' House.

'Your petitioners, with all submission and humility, beg to represent to your Lordships, that for certain centuries they have enjoyed the high privilege of legislating for themselves in all matters relating to their internal government.

'That this privilege has enabled them to arrange and maintain a system of education by means of which the rising generation is nurtured in the doctrine and discipline of the Established Church.

'Your petitioners, therefore, humbly, but earnestly pray, that a measure subversive of a privilege so beneficial to the extension and preservation of the Protestant form of religion established in this kingdom may not pass into a law.

'And your petitioners will ever pray.

'Given at our House of Convocation, &c., &c.'

CAMBRIDGE, *April 6.*—The Chancellor's gold medals, for the two best proficients in classical learning among the commencing Bachelors of Arts, were this day adjudged to Henry Goulburn and Edward Howes, both of Trinity College.

May 21.—The Norrisian prize for the year 1834, was this day adjudged to the Rev. Thomas Myers, M.A. of Trinity College, for his essay on the following subject:—"The divine origin of Christianity proved by the accomplishment of the prophecies delivered by Christ himself."

The following summary of the members of the university is given in the Cambridge Calendar for the present year:—

	Members of the Senate.	Members on the Boards.
Trinity	782	1616
St. John's	523	1060
Queen's	112	374
Caius	120	284
Christ's	94	239
St. Peter's	88	198
Emmanuel	105	209
Catharine Hall	60	179
Corpus Christi	85	208
Jesus	82	181
Clare Hall	80	162
Magdalene	73	176
Trinity Hall	39	132
Pembroke	51	130
King's	79	112
Sidney	47	84
Downing	29	55
Commorantes in Villa	10	—
	<hr/> 2459	<hr/> 5399

June 5.—The Chancellor's medal for the best English poem was this day adjudged to Thomas Whytehead, of St. John's College. Subject—'The Death of his late Royal Highness the Duke of Gloucester.'

LONDON UNIVERSITY.—On Saturday, the 16th of May, the Right Hon. Lord Nugent distributed the following prizes to the medical students:—

Practice of Medicine.—Gold medal, Thomas Bradshaw, of Huddersfield; 1st silver medal, George G. Holmes, of London; 2nd silver medals, George Rigden, of Wingham, Kent, and Philip B. Ayres, of High Wycombe.

Anatomy and Physiology.—Gold medal, Mr. Thomas Tyerman, of London; 1st silver medal, Mr. Philip B. Ayres; 2nd silver medal, Mr. Thomas Morton, of Newcastle on Tyne.

Materia Medica.—Gold medal, Mr. William Marsden, of Dewsbury, Yorkshire; 1st silver medal, Mr. William Weston, of Sidlescomb, Sussex; 2nd silver medal, Mr. M. Moorhouse, of Holmfirth, Huddersfield.

Chemistry.—Gold medal, Mr. Alfred Leggatt, of Guilford, Surrey; 1st silver medal, Mr. William Coates Binks, of Durham; 2nd silver medal, Mr. Thomas Tyerman.

Surgery.—Gold medal, Mr. Thomas Morton; 1st silver medal, Mr. Thomas Bradshaw; 2nd silver medal, Mr. Henry Walker, of Hampstead.

Midwifery.—Gold medal, Mr. Thomas Morton; 1st silver medals, Mr. Arthur Tibson, Mr. Samuel Ward, of Stowmarket, Suffolk.

Practical Anatomy.—Gold medal, Mr. Thomas Bradshaw; 1st silver medal, Mr. W. Lord, of Farringdon, Berks; 2nd silver medal, Mr. Thomas Morton*.

Comparative Anatomy.—Mr. William Henry, of London.

Medical Jurisprudence.—The Prize, Mr. Egerton Baines, of London.

Botany.—Gold medal, Mr. Arthur Tibson; 1st silver medal, Mr. Philip B. Ayres; 2nd silver medal, Mr. Thomas Baskerville.

KING'S COLLEGE.—On Saturday, May, 23, the annual distribution of prizes in the medical department took place: the Bishop of London took the chair in the absence of the Archbishop of Canterbury. Professor Mayo gave a satisfactory account of the proceedings of the medical department during the session, and stated that the number of pupils had exceeded that of any former year. The names of the successful candidates were as follows:—

Anatomy.—Medal, H. Lee; certificates, F. F. Whitfield, R. Jones, C. Vines.

Practical Anatomy.—Medal, R. Jones; certificates, H. Lee, W. Trew, F. F. Whitfield.

* This gentleman having obtained a like medal in the class of Anatomy and Physiology, the 2nd silver medal in this class was given to Mr. Henry Walker, the next in merit.

Botany.—Medal, G. R. Carter; certificates, C. J. Cox, J. D. Campbell, W. H. Thornthwaite.

Chemistry.—(Professor Daniell), medal, F. Oldfield Ward, medal; certificates John Wilson, W. Gerard, A. Smee.

Materia Medica.—Silver medal, R. Druiitt; certificates, G. R. Carter, A. V. Dennis, H. Payne.

Practice of Medicine.—Medal, J. Chalice; certificates, S. L. Muller, G. R. Carter, G. Smith.

Forensic Medicine.—Medal, F. F. Whitfield; certificates, J. Symons, F. Cox. G. R. Carter.

Midwifery.—Medal, W. B. Whitfield; certificates, R. Keen, F. F. Whitfield, F. Cox.

Surgery.—Medal, W. B. Whitfield; certificates, G. R. Wyatt, C. Vines, F. W. Pittock.

After these rewards had been distributed, the right reverend chairman called upon Professor Green for a report of the result of the examination conducted by all the professors for the gold medals given for *general proficiency*. The successful competitors were Messrs. W. B. Whitfield, and G. R. Carter.

The reverend principal then rose to declare the names of those who, for their proficiency in religious knowledge, had merited the "Leathes' prizes;" they were (first prizes) A. V. Dennis, and Messrs. Taylor and J. P. White, *æquales*. Certificate, H. Hensley.

PUBLIC EDUCATION.—On the 21st of May, Lord Brougham brought forward the subject of public education in the House of Lords. In his introductory speech he went at considerable length into various statistical details, showing that though much progress had been made in providing means for general education by the unaided efforts of the people themselves, yet that much remained to be done. He said, that according to the report of the Education Committee in 1818, it appeared that there were at that time in England and Scotland, independent of Sunday schools, schools for educating 640,000 children—viz., endowed schools containing 166,000, and schools supported by voluntary contributions for 478,000. Of nearly 500,000 children who received daily education in these unendowed schools, one-half of that number paid for their education, while the remainder received it through the donations of benevolent persons. In 1828 the number of children in unendowed day schools had increased to upwards of 1,000,000. But while the number of scholars who attended unendowed day schools had thus increased, the numbers in the endowed schools during the same period had fallen off to 150,000. The number of children between the ages of seven and twelve, the time most commonly devoted to the purposes of education, has been estimated at one-ninth of the whole population. He therefore thought the number of schools should be increased, the system of instruction extended, and that education ought to be more equally distributed; for whilst, take England through, the average was about one in twelve, in the populous counties of Middlesex and Lancashire the average did not exceed one in thirteen, or one in fourteen. In populous towns—

London, Westminster, and Southwark, for instance,—and in some of the great manufacturing towns in the north of England, the average of education, instead of being one-twelfth or one-thirteenth, was more than one-fifteenth. In 1818 the average of Lancashire (all England being then one-fifteenth) was one twenty-fourth; that part of the country had since considerably improved. In the county of Middlesex, there were as many as thirty charitable establishments for the purposes of education; and, in the year 1819, the revenue of those establishments amounted to 130,000*l.* a-year. They educated but 2,260 children: the cost, then, for each child, was 9*l.* 10*s.* annually. There were four great establishments in London, with a revenue of 84,000*l.*, which educated only 1,630 children, at the rate of 52*l.* each. St. Paul's, a day-school, carried on the business of education at an expense of from 15*l.* to 20*l.* for each pupil; and the Foundling Hospital gave education to 195 children, at an enormous expense. Under a proper system, his lordship calculated that 30,000 children might be educated at an expense, annually, of 30,000*l.*, or 1*l.* each. For a long time past, the footing upon which the great endowments of this country stood had been universally deplored; but the subject had never been efficiently taken up. His lordship concluded by moving the following resolutions, which were agreed to without opposition:—

1. That although the number of schools, where some of the elementary branches of education are taught, has greatly increased within the last twenty years, yet that there still exists a deficiency of such schools, especially in the metropolis and other great towns, and that the means of elementary instruction are peculiarly deficient in the counties of Middlesex and Lancaster.

2. That the kind of education given at the greater number of the schools now established for the poorer classes of the people is of a kind by no means sufficient for their instruction, being for the most part confined to reading, writing, and a little arithmetic; whereas, at no greater expense, and in the same time, the children might easily be instructed in the elements of the more useful branches of knowledge, and thereby trained to sober, industrious, prudent, and virtuous habits.

3. That the number of infant schools is exceedingly deficient, and especially in those great towns where they are most wanted for improving the morals of the people and preventing the commission of crimes.

4. That while it is expedient to do nothing which may relax the efforts of private beneficence in forming and supporting schools, or which may discourage the poorer classes of the people from contributing to the cost of educating their children, it is incumbent upon parliament to aid in providing the effectual means of instruction where these cannot otherwise be obtained for the people.

5. That it is incumbent upon parliament to encourage, in like manner, the establishment of infant schools, especially in the larger towns.

6. That, for the purpose of improving the kind of education given at schools for the people at large, it is expedient to establish, in

several parts of the country, seminaries where good schoolmasters may be trained and taught the duties of their profession.

7. That there are at present existing, in different parts of the United Kingdom, funds, as well real as personal, to a large amount, given or bequeathed to charitable uses, connected with education, but which, partly from want of objects in the particular places to which such gifts are confined, partly from want of proper powers in the trustees, partly from other defects in the foundations, and partly from a change in the habits of the people, have become, in many instances, unavailing to the purposes for which they were originally intended, and are now productive of very inadequate benefit to the country; while, from want of publicity, abuses frequently creep into the management of them, only to be remedied by tedious and expensive litigation.

8. That, in order to superintend the due and just application of the funds from time to time voted by parliament for the promotion of education, to establish proper seminaries for training teachers, to encourage the trustees of charities connected with education in using beneficially the powers now possessed by them, to watch over the abuses of trust committed by such trustees, and to control the exercise of such new powers as parliament may grant them, it is expedient that a board of commissioners be appointed, with powers and duties to be regulated by act of parliament.

9. That it is further expedient to give such board a power of filling up the number of trustees when these have fallen below the quorum in any will or deed of foundation, subject to the approval of the special visitor, where there is one; and to authorize, subject to the like approval, the sale, the mortgage, or exchange of any property given to charitable uses connected with education, for the promotion of the objects of the foundation, as far as these may be deemed beneficial to the community.

10. That it be further expedient to give such board a power, subject as aforesaid, of directing the trustees of any grammar school, where the funds are sufficient, to apply such part thereof as may not be wanted for teaching grammar, in providing the means of common and improved education for the people at large.

11. That it is further expedient to give such board a power, subject as aforesaid, with consent of the trustees, and subject to appeal in parliament, to apply a portion of the funds intrusted to them in such a manner as to produce a more general benefit, and at a cheaper rate, in the education of the people at large, where the particular employment of the funds directed by the founder has become difficult from want of objects, or prejudicial from the employment pointed out being no longer beneficial to the community.

12. That it is further expedient to give such board the power, in conjunction with the trustees, of imposing conditions upon the masters of endowed schools, in respect of taking boarders and otherwise conducting themselves: and of removing them, with consent of the trustees, in case of breach of such conditions.

13. That it is further expedient to give such board the power of

calling, from time to time, for accounts of the management of endowed schools, both from the trustees and from the teachers.

14. That it is expedient to require all trustees of charities connected with education to deliver, yearly, to his Majesty's principal secretary of state, an account of all sums of money received and expended by them in the execution of their trust.

EDUCATION IN ENGLAND.—A committee of the House of Commons has been appointed, to inquire into the present state of the education of the people in England and Wales, and into the application and effects of the grant made in the last session of parliament for the erection of school-houses, and to consider the expediency of further grants in aid of education, and to report their observations thereupon to the house.

CHARITABLE INSTITUTIONS FOR THE PURPOSES OF EDUCATION IN ENGLAND AND WALES.—Mr. Harvey, in the House of Commons, on June 11th, on moving the following resolution respecting these Institutions, stated the following particulars:—The inquiries of the commissioners appointed to investigate the subject commenced in 1818, and were continued down to 1834, and the twenty-fourth volume of their labours had been laid upon the table of the House, which alone consisted of about 800 folio pages. The expense of printing each volume ran from 600*l.* to 700*l.* The cost of the commission in round numbers might be estimated at a quarter of a million sterling. The charities of 28 English counties had been inquired into, and the reports, so far as these charities were concerned, were completed. In these 28 counties there were 26,751 charities or endowments, having property of various descriptions connected with them. There were six other English counties, the charities of which had been partially investigated, and they amounted to 1,734. In 24 out of the 28 counties in which the investigation was perfected, the actual amount of the charitable incomes arising from land or houses was 331,703*l.* a year. In connexion with these charities confined to these 24 counties, there was actually money in the funds, on mortgages, and in various convertible securities, amounting to 2,228,030*l.* It might be inferred that the amount of property in strict connexion with charitable educational objects was little short of 5,000,000*l.* In 33 counties there was a population of 10,000,000 persons; and in those counties were 2,277 infant-schools, 28,311 day-schools; and there was elementary information imparted in those day-schools to 982,744 children. In the Sunday-schools of those counties were 1,062,810 regular attendants. Mr. Harvey, after detailing the proceedings which had been taken in the courts of law in reference to various cases, moved that a select committee be appointed to examine and consider the evidence in the several reports presented to the House of Commons by the commissioners appointed to inquire into the several charities of England and Wales; and also that measures might be adopted to complete at an early period the inquiry relative to the investigation of charities: which was agreed to.

ANATOMICAL KNOWLEDGE.—During the years 1833 and 1834, the numbers of bodies anatomically inspected at the provincial schools of medicine and surgery, under the regulations of the present act of parliament, were as follows : At Birmingham, 43 ; Manchester, 37 ; Sheffield, 30 ; Bristol, 24 ; Liverpool, 22 ; Leeds, 12 ; Exeter, 6 ; Bath, 5 ; Hull, 4 ; Cambridge, 1 ; Nottingham, 1 ; in all 184. In all cases the act has been rigidly complied with, and the certificates of burial lodged with the secretary of state. In his report to parliament, the inspector of anatomy expresses his belief that there is not a medical teacher who would now receive an exhumed body.

CITY OF LONDON ROYAL BRITISH SCHOOL FOR BOYS, Harp Alley.—The last yearly report, which was agreed to in February last, states that “the average attendance of boys during the last year has been fully equal to that of any preceding, and the number now on the books is 271. The committee think that the objects contemplated by the founders of the institution will be considered as mainly accomplished, if the present numbers be maintained, and the school be conducted in such a manner as to convey useful information, and form virtuous habits. That it is so conducted, they can confidently affirm : in point of discipline, it was never in a better state than it is at present ; and though the committee can have no knowledge of the great majority of the boys who have left the institution, yet there are many respecting whom they have received the most gratifying reports. Not only has the education which they have received enabled them to obtain situations for which they would otherwise not have been qualified, but their excellent conduct demonstrates that they have imbibed those religious principles, without which there can be no real respectability of character, nor hope of the Divine favour.”

STAINES.—In our last Number we gave an account of the establishment of a *Society for the Promotion of Science and Literature in Staines and its Vicinity*, and added some extracts from the opening address of the Rev. Dr. Jones, vicar of Bedfont. An address from the same gentleman, on the close of the season, delivered on the 28th of April, has now been published, from which the society appears to have completely succeeded. The number of members amounts to 81 ; the income has exceeded the disbursements to a very large amount ; and a sum of 1000*l.* has been raised in shares of 25*l.* each, in order to erect a building for the purposes of the society. The reverend gentleman, in his address, thus alludes to the objections raised to the education of the working-class :—“I never could see, in the spread of knowledge and in the enlightenment of the popular mind, those portentous evils so often conjured up to repress the mental advance of the ignorant many, and to justify the fears and the indolence of the hitherto educated few. I never could, by any sophistry, connect the knowledge of right with the practice of wrong. I never could discover why a tradesman, or mechanic, or labourer, who devoted his leisure time to liberal and elevating pursuits, could become on that account a worse member

of society, or a less trust-worthy subject of the state. The little conceit likely to be created by his literary superiority for the moment over his compeers must instantly cease when they become equally intellectual. Knowledge of some kind every mind must have; and if pure and moral ambitions do not obtain a hold, low and degrading ones most assuredly will."

EALING GROVE SCHOOL.—A school upon somewhat novel principles has been opened here, and placed under the management of Mr. Craig. It is for both boarders and day scholars, at an exceedingly low rate of payment; the boarders must be not less than twelve years of age; and the day-scholars are to take their dinners with them. "The boys of both classes, (boarders and day scholars,) who are strong enough to work in the garden, will go out twice a day to work." Care will be taken not to expose them to bad weather, nor to task them beyond their strength. When employed in tilling that part of the land of which the produce goes to the support of the establishment, they will receive fair wages:—but a separate piece of land will be allotted to such of the boarders or day scholars as may be able to cultivate it on their own account, and whose conduct shall render them deserving of that advantage. They will have to pay a low rent *punctually*, once a month. The quantity allotted to each will not exceed $\frac{1}{8}$ of an acre. The tenant may either take the produce to his family, or sell it to the school. * * * Besides the instruction in reading, writing, arithmetic, &c. commonly given in schools for the industrious classes, lessons will be given in drawing, carpentry, and some other useful arts, to any boys who may have a turn for them. The best behaved scholars will be admitted in the evening for that purpose."

WINCHESTER SCHOOL.—Additional rooms have lately been completed for the convenience of tuition, and for the reception of the school library, chiefly at the expense of the Warden and Fellows of the College. His Grace the Archbishop of Canterbury, who was educated as a scholar on the foundation, and was successively Fellow of both the St. Mary Winton Colleges, has transmitted to the society a donation of 500*l.*, which will be applied principally to the purchase of books.

LIVERPOOL MECHANICS' INSTITUTE.—It has been for some time contemplated to erect an appropriate building for the use of this Institution, and it is now stated that the arrangements for effecting this object are so far completed, that plans have been called for. The new building will occupy one thousand nine hundred square yards, and will comprise a lecture-room capable of containing from one thousand to one thousand two hundred persons; a comfortable house for the keeper; an apparatus room; a laboratory and chemical class-room; a class-room for the English language, capable of containing from eighty to one hundred and twenty persons; one for writing and arithmetic, for one hundred and sixty or two hundred persons; one for mathematics, for eighty or one hundred and twenty persons; one

for receiving musical instruction, for forty or fifty persons ; one for figure-drawing, for eighty or one hundred and twenty persons ; one for landscape, perspective, and architectural drawing, for one hundred and sixty or two hundred persons ; one for mechanical drawing, for sixty or eighty persons ; one for geography, use of maps, globes, &c., for fifty or sixty persons ; one for the study of the French language, for fifty or sixty persons ; one for other continental languages, for thirty or forty persons ; making, in all, eleven class-rooms, capable of containing about one thousand pupils, and affording the opportunity of instructing, at the same time, this large number, in eleven different branches of knowledge and art. Besides this accommodation, there will be a library and reading-room, a committee-room, a museum-room for casts, models, &c. ; and cellaring will be constructed, from which the committee think it probable that they may derive an annual rent. •

BANBURY MECHANICS' INSTITUTE.—An institution of this description has just been established at Banbury, a place containing about 5000 inhabitants. The opening lecture was delivered by Dr. Conolly, of Warwick, on Thursday, April 16.

COVENTRY MECHANICS' INSTITUTE.—On Wednesday, April 22d, the annual meeting of this institution was held. In this institution, there are classes for writing, arithmetic, practical geometry, geography, and the use of the globes, drawing, English grammar and composition, and others on the system of mutual instruction. Hopes are entertained by the directors of being able to obtain an entire building for the use of the institution.

WEST RIDING PROPRIETARY SCHOOL, WAKEFIELD.—The annual meeting of the friends of this institution was held on June 10th, and was numerously attended. The Rev. Charles Musgrave, Vicar of Halifax, was in the chair. The report of the principal stated that the parents of the pupils continued to express the highest satisfaction with the progress which their children made ; that the numbers continued to increase so rapidly as to render it difficult to procure a nomination, and that there was a confident assurance that the success of the institution was based on a solid and firm foundation. The directors stated that the number of students whose names appeared on the boards of the school in the course of the half year now ended, was 175, and that there was every prospect of an immediate and large increase to this number. Two additional masters had been appointed. It was also stated, that owing to the expenses incurred in completing the buildings, grounds, &c., the institution was at present in debt to the amount of about 1800*l*. Towards the liquidation of this there will be a saving of at least 300*l*. in this year's expenses, and from the rapidly increasing number of pupils, there is not the slightest reason to doubt that the whole amount might be paid off in the course of four years. But as the directors are anxious to free the institution from every incumbrance, they proposed that the number of shares should be increased from 240 to 300, the 60 additional shares being calculated as sufficient to dis-

charge the debt. A resolution to this effect was adopted by the meeting. The Morpeth prize was awarded to Master William Spicer Wood, for an essay on Lord Bacon's position, that "Knowledge is Power." The meeting separated, highly satisfied with the manner in which the institution was conducted, and with the progress of the pupils.

SCOTLAND.

DUNDEE WATT INSTITUTION.—The eleventh annual report of this institution, dated May 4, 1835, contains some valuable remarks on the great advantages of a classified and analytical catalogue to the works in the library. The directors state that, "It is too often supposed that all which is necessary has been done when a good book has been purchased and placed on the shelves; whereas, its circulation will be greatly promoted by its contents being stated, however briefly, in the catalogue. Nor is it sufficient to ensure all the use being made of them that is desirable, that there be good books in the library and their contents marked in the catalogue. Their arrangement is a point of more importance than seems to be usually supposed. As long as the books are few, an alphabetical arrangement may suffice; but as soon as they are numerous, the bringing together those on the same subject is not only a natural, but a necessary proceeding. It enables the members to see what books on any one branch of science are to be found in the library; and it facilitates their obtaining some other work on the same subject, should the one they particularly wish happen to be out. The latter advantage will in practice be found of no mean importance in bringing all the books into use; for to such an extent was, formerly, the occurrence of a continual demand for a few particular works attended by repeated disappointments, while equally good treatises on the same subjects lay unused, that the directors had taken into consideration the necessity of preparing a few hints to the members on the nature and merits of different books; but since the library was arranged according to a systematic classification, the works in the different departments have been so much more generally used as to render such hints less necessary, if not absolutely useless." They therefore decided on having a catalogue prepared on the above-mentioned plan, and the following is given as the result:—

There appear to have been, on an average, 206 readers who have been using the different classes of books in the following proportions:

	Average number of readers during nine years.	Average number of readers during the past year.
Mathematics	5	7
Natural Philosophy	14	22
Chemistry	8	6
Arts and Manufactures	12	24
Natural History	3	23
Geography and History	15	59
Mental Science	6	43
Miscellaneous	18	22
Average total of readers	81	206

The library contains above eleven hundred volumes, and the catalogue extends to ninety-six pages, a brief summary being given of the contents of each book. This plan is exceedingly useful to members who are not familiar with the technical titles of scientific works, and it has the advantage of giving to the student who has already made some progress, a notion of the divers modes of discussing a subject which have been followed by different authors; besides affording facilities for judging which of two or more works on the same branch of knowledge is best suited to his taste, or is most likely to supply the information of which he is in pursuit. The place where each work is printed, and the number of plates and cuts with which it is illustrated, are also subjoined. The catalogue is divided into eight departments, and an index is given of these divisions and their respective sub-divisions. The eight departments are as follows:—1. Mathematics; 2. Natural Philosophy; 3. Chemistry; 4. Arts and Manufactures; 5. Natural History; 6. Geography and History; 7. Mental Science; 8. Miscellaneous. The works which treat on mathematics, for instance, are arranged under the following sub-divisions:—1. Systems; 2. Algebra; 3. Arithmetic; 4. Conic Sections; 5. Geometry; 6. Miscellaneous. When a work, such as ‘Hutton’s Course of Mathematics,’ treats upon a subject in a complete manner as a system, it is arranged under the first of these heads.—The same writer’s ‘Recreations in Mathematics and Natural Philosophy’ is inserted under the sixth sub-division; and, as might be expected, it is also arranged in the corresponding division under the head Natural Philosophy, with a reference to the number at which it stands in its character as a mathematical work. Under the title of each sub-division there is a reference in small type to the subdivisions, where information on the same subject may be found in a work placed under another head. Those books which do not fairly come within the scope of any special division are inserted under the head of Miscellaneous.

IRELAND.

UNIVERSITY OF DUBLIN.—*Trinity College.—Trinity Term Examinations.*—The names of the successful candidates in each rank are arranged, not in order of merit, but in the order of standing on the college books.

SENIOR SOPHISTERS.

HONOURS IN SCIENCE.—*First Rank.*—James Keith; Thomas Osborne Davis. *Second Rank.*—Edward Trevor.

HONOURS IN CLASSICS.—*First Rank.*—Theodore A. Walrond; Edw. Trevor. *Second Rank.*—W. Babington; W. Leslie.

JUNIOR SOPHISTERS.

HONOURS IN SCIENCE.—*First Rank.*—Mr.* George Augustus Shaw; William Lee; John Magnus Lynn; Malachi Stronge Hussey; John Harris Flynn. *Second Rank.*—James John Trayer; Lewis Morgan; Matthew Lynch; William Keogh; Lewis Higgins; James Carleton; Jasper Joly; Bennett Johns.

* In the University of Dublin, the title of *Mr.* is given to Fellow-Commoners.

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SENIOR FRESHMEN.

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HONOURS IN CLASSICS.—*First Rank.*—Mr. Thomas Torrens; Richard Wrightson; William Roberts; Patrick Murphy; Cornelius Percy Ring. *Second Rank.*—Mr. James Wise; William Humphreys; Michael Roberts; John Perrin; Edmund Meredith; John Jellett; Henry Stewart; George Wallen; William J. Thornhill; William O'Connor.

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HONOURS IN CLASSICS.—*First Rank.*—John Flanagan; Nicholas Robert Wrixon; John William Laughlin; George Longfield; Hugh Law; Thomas Dobbin; Thomas Tracy. *Second Rank.*—Mr. Charles Maude; Mr. Hugh M'Calmont Cairns; John O'Neill; George Salmon; William Fausset Black; Robert Benjamin Peebles; Richard Longfield; Michael M'Dermott; Patrick Reynolds; Jeremiah Murphy.

ROYAL BELFAST ACADEMICAL INSTITUTION.—*College Department.*—*Friday, 1st May, 1835.*—This day, at the close of the Session, Premiums were distributed in the Common Hall, to the following Students, in the presence of many literary gentlemen, and other respectable individuals:—

GENERAL PREMIUMS.—1. For excelling at the General Certificate Examinations, in Mathematics and Physical Science,—(Silver Medal.)—Gilbert Jamieson, Newtownards.

2. For excelling at the General Certificate Examinations, in Intellectual and Moral Philosophy, and Polite Literature,—(Silver Medal.)—Thomas Alison, Randalstown; Premium, Joseph M'Donnell, Newtownlemavady.

3. For the best Public Reading in the Common Hall,—(Silver Medal.)—Samuel J. Moore, Market-hill.

4. For an inquiry into the Antiquity and early state of Science and Arts in the East,—(Prescribed by the Faculty.)—Adam D. Glasgow, Institution; Samuel H. Elder, Ballyeaston.

5. **DR. THOMSON'S PREMIUM,**—For the Solution of Mathema-

tical Questions, proposed by the Faculty,—Adam D. Glasgow, Institution.

For excelling at Voluntary Examinations at the commencement of the Session, on subjects proposed to the Students of last year:—

HEBREW CLASS.—On the first five Chapters of Genesis,—William Cromey, Rathfriland.

MORAL PHILOSOPHY CLASS.—On M'Culloch's Principles of Political Economy,—Joseph M'Donnell.

LOGIC AND BELLES LETTRES CLASS.—On the Second Book of Locke's Essay,—Oliver Leitch, Letterkenny; John K. Armstrong.

GREEK CLASS.—On Grecian History,—James Davison, Rathmelton; Thomas Millar, Cookstown.

For Essays on Subjects proposed to the different Classes of last Year.

DIVINITY CLASS of the Synod of Ulster:—For an Essay on the Fall of Man and its consequences,—(Silver Medal)—Thos. Barclay, Brigh; Premium, Randal M'Collum, Cavan.

DIVINITY CLASS of the Associate Synod:—For an Essay on the Doctrine, Discipline, and Government of the Christian Church, during the first three centuries,—(Silver Medal.)—John H. Reid, Randalstown; Premium, Samuel J. Moore, Markethill.

HEBREW.—For an account of the Opinions respecting the Poetry of Scripture,—William Cromey.

LOGIC AND BELLES LETTRES CLASS.—For an Essay on Reasoning concerning Final Causes, with a view of its various applications,—Thomas H. Craig, Banbridge. For an Essay on Shakspeare's Delineation of Characters, as illustrative of the Principles of Dramatic Composition,—Thomas H. Craig.

For General Ability, Diligence, and Proficiency, during the Session, in the daily Examinations, the Composition of Essays, and other Exercises, in the different Classes.

DIVINITY CLASS of the Synod of Ulster.—For an Essay on the Trinity, John Ritchie, Comber.

For an Essay on the Gospel Plan of Salvation,—Alexander C. Canning, Malin, Donegal; William Rossborough, Ballymena; Isaac Nelson, Institution; Robert Blain, Institution.

HEBREW CLASS.—Senior Class.—William Cromey, Rathfriland; Robt. White, Broughshane.—Junior Class—S. H. Elder, Ballyeaston; Charles Gregg, Belfast; R. Johnson, Broughshane; Wm. J. Henry, Newtonards.

NATURAL PHILOSOPHY CLASS.—Gilbert Jamieson, Newtonards; Jacob Alexander, Institution; William Millen, Belfast; Joseph M'Donnell, Newtownlemavady; Alex. Kerr, Markethill; John M'Farland, Castlederg.

MATHEMATICAL CLASSES.—Senior Class.—Hans S. Hawthorne, Belfast; William Bottomly, Belfast.—Junior Class, Senior Division—Hans S. Hawthorne, Belfast; John Davison, Lisburn.—Junior Division—William J. Henry, Newtownards; John K. Reid, Rathmelton; William Bottomly, Belfast; John Irvine, Lyle-Hill; Hut-

chipson M'Fadden, Ballymoney; Isaac Mack, Ballynahinch; James Acheson, Glenarm; Hugh Brown, Ballynahinch; Wm. Andrews, Belfast, and Robt. Irvine, Boardmills, equal.

MORAL PHILOSOPHY CLASS.—John Montgomery, Killead; Robt. M'Connell, Belfast.

LOGIC AND BELLES LETTRES CLASS.—John Dickson, Belfast; William Bottomly, Belfast; Robert Montgomery, Bangor; James Bewglass, Belfast, and A. G. Malcom, Belfast equal; John Smith, Garvagh; James Bain, Belfast; Alex. Caldwell, Ray, County Donegal.

For an Essay on the Analytical and Synthetical methods of surveying Mental Phenomena, (prescribed to private Students,) William Dobbin, Toome.

GREEK CLASS.—Senior Division—Alexander Caldwell, Ray; Samuel Black, Ballynahinch; John Craig, Crossroads (Derry); William Gibson, Dungiven; Robert Montgomery, Bangor; William Craig, Crossroads.—Junior Division—Thomas Ringland, Killileagh; Charles Morrison, Belfast; Abraham Irvine, Anahilt.

LATIN CLASS.—Alexander Caldwell, Ray; Samuel Black, Ballynahinch; John Craig, Crossroads; William Gibson, Dungiven; Robt. Montgomery, Bangor; Samuel Craig, Crossroads.

For excelling at the Public Examinations in the Common Hall, at the end of the Session.

ANATOMY AND PHYSIOLOGY.—First Class—Alexander Harkin, Belfast.—Second Class—James Mawhinney, Belfast; Robt. Stuart, Moneymore.

IRISH CLASS.—Silver Medal (from the Institution), Henry M'Manus, Virginia, Cavan. Silver Medal (from the Ossianic Society, Glasgow), Robert White, Broughshane. Premium, Phineas Whiteside, Brigh.

NATURAL PHILOSOPHY.—Jacob Alexander, Institution.

MATHEMATICS.—William Bottomly, and John K. Reid, equal.

MORAL PHILOSOPHY.—William M'Creedy, Belfast.

LOGIC AND BELLES LETTRES.—John Dickson, Belfast.

GREEK.—Alexander Caldwell, Ray.

LATIN.—Robert Montgomery, Bangor.

ELOCUTION CLASS.—Samuel John Moore; George A. Noble, Belfast; Adam D. Glasgow; Thomas Barclay; James White, Baillieborough; Wm. Rossborough; Robert Quin, Ballibay; Hans S. Hawthorne.

After the distribution of the Premiums, the following subjects were announced for vacation exercises:—

Dr. Tennent's Exhibition will be given to the best answerer on the following subjects, at an examination to commence on the second Friday in Nov. next:—

The History of Greece (by the Society for Diffusing Useful Knowledge, 9 chapters,) from the commencement to the destruction of Thebes, by Alexander, with the Geography and Chronology; the 1st volume of Sir James Mackintosh's History of England, (in Lardner's Cyclopædia,) with the Geography and Chronology; Powell's

History of Natural Philosophy, (in *Lardner's Cyclopædia*;) and *Sime's Sacred Geography*.

Dr. Thomson's Premium will be given for the best exposition of the *Theory of Evolutes*: showing that the equation of the Evolute of any plane curve may always be obtained by *Analytical Geometry* only, without the aid of the *Differential or Fluxional Calculus*; and giving examples in the case of the *Ellipse and Parabola*.

The Faculty offered Premiums to the Students generally:—1st. For a statistical account of some Parish or District in Ireland, written according to the most approved models. 2. For an English Poem on "Rome Sacked by Alaric." 3. For an Essay on the respect paid to Age, among the ancient nations. 4. For an Historical Account of Halley's Comet; with an enumeration of the various circumstances which have been ascertained to control its motions. 5. For a view of the principal varieties in the Style of English Prose, since the appearance of Dr. Johnson's *Rambler*.

Premiums were also offered by the different Professors, to the members of their respective classes during the last session, for the following subjects:—

Divinity Class of the Synod of Ulster.—(Senior Division)—An Analysis of the Acts of the Apostles. 2. (Junior Division)—An Essay on the Credibility of the Mosaic History. 3. (Both Divisions.)—The Silver Medal—An Essay on Predestination. **Divinity Class of the Associate Synod.**—1. The Medal, for an Essay on the State of Genuine Christianity at the commencement of the Reformation by Luther. 2. A Premium, for an Essay on the evidence for the truth of Christianity derived from the observance of the Lord's Supper. **Hebrew Class.**—1. An Examination on Isaiah, from chapter 40th to the end. 2. An Examination on the first ten Psalms, (to be confined to Students of the Junior Class who did not obtain Premiums.) **Natural Philosophy.**—An Essay on the relative merits of Rail-roads and Canals. **Mathematics.**—(Junior Division of the Junior Class.)—For a voluntary examination on the first four chapters of Young's *Algebra*. **Logic and Belles Lettres.**—1. A voluntary examination on the third book of *Locke's Essay*. 2. An illustration of *Bacon's Idols of the Mind*, with an account of the principal Fallacies and Sophisms which occur in reasoning. 3. An illustration of the principles of Eloquence, especially that of the Pulpit, by references to the most distinguished preachers. **Greek.**—1. (Higher Division)—A voluntary examination on the 8th, 9th, 10th, and 11th chapters of the *History of Greece*, by the Society for Diffusing Useful Knowledge. 2. (Lower Division)—The 6th and 7th chapters of the same History. 3. A Critical Essay on the *Œdipus Tyrannus*. **Latin.**—1. A voluntary examination on the History of Rome, from the first Triumvirate to the death of Augustus. 2. An Essay on *Horace's Art of Poetry*, compared with his Epistle to Augustus.

The Prize Essays must be forwarded to the President of the Faculty, or to the different Professors, on or before the 1st of January, 1836; without the Author's name, but with a sealed letter containing it, or with mottoes.

EDUCATION IN IRELAND.—On the 11th of June, a bill was brought into the House of Commons by Mr. Wyse, the Earl of Kerry, and Mr. W. S. O'Brien, 'For the Establishment of a Board of National Education, and the Advancement of Elementary Education in Ireland.'

It would be premature to give any detailed account of a proposed measure, which before it passes into a law may receive numerous modifications from either branch of the legislature, if indeed the pressure of other matters, which may be deemed more immediately urgent, shall permit its going through all the necessary stages at this late time in the session. At present we content ourselves with stating, that it appears to be framed in the same spirit which dictated the appointment of the commission by Lord Stanley in 1831, the establishment and proceedings of which we have already noticed (see No. V., pages 189—192; No. VI., pages 235—260; and No. XVIII. pages 193—213). We cannot however refrain from now inserting the preamble to this proposed measure, which, if adopted by the legislature, will so far establish a most important and much controverted principle. The words are these:—'Whereas it is right and expedient that in every state there should be established, widely diffused, and permanently maintained, such a system of public education as may best tend to improve the physical, intellectual, moral, and religious condition of its inhabitants, and promote the virtue and happiness of the same; and whereas this object is most effectually to be attained by the joint contributions and exertions of the Government and the people.'

22, Ludgate Street, July 1, 1835.

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THE
QUARTERLY
JOURNAL OF EDUCATION.

ORIGIN AND HISTORY OF THE UNIVERSITY OF
GÖTTINGEN*.

BY giving some account of the University of Göttingen, we trust we shall render an essential service to the lovers of literature and science in general, and meet the wishes of those who are frequently inquiring about the particulars of an institution, of which they have heard so much and know so little. To acquire a correct idea of the character of this University, it is necessary to become acquainted with its history, its constitution and organization, its discipline, its modes of instruction, the habits of the students, and above all, the different establishments annexed both to the whole university and to the single faculties. Universities are the great fountain-heads of science and literature in every country where they have been established, but more particularly in Germany, both on account of their peculiar character, and their close connexion with the state-governments, whose favourite aim it is to make them the focus in which the intellectual light of the nation is chiefly concentrated. They afford a supply of human knowledge in all its branches, adapted to the peculiar disposition of every mind which, when brought within the sphere of attraction, will catch the inspiration of its own proper science; for each science exerts a certain attractive power on every mind that has some affinity to itself. Without the unceasing labours of the universities, science would soon submit to the reigning taste or philosophy of the times. They are constantly forming, both by precept and example, a hardy race of men in all the departments of knowledge, who by their intellectual vigour, as well as by their extensive

* Communication from Göttingen.

erudition, keep alive and promote true science. In all the nobler walks of discovery and human speculation the universities of Germany are foremost; and nothing presents a nobler subject for contemplation than the keen emulation among the several professors belonging to the same institution, and the generous struggle between the several universities. In this glorious race Göttingen has at all times maintained a distinguished rank, and has not been left behind either by other German institutions or by the learned societies of other nations.

When King George II. resolved to raise the standard of education in his electorate of Hanover, the establishment of a university had, for some time, formed the subject of serious deliberation in his privy council. Helmstadt, the university of Brunswick (founded in 1576, and annihilated in 1809 by Jerome Napoleon, king of Westphalia), was then superintended by the common care of the courts at Hanover and Brunswick. But this common superintendence had frequently been the cause of disagreement between the two states, and did not, in any great degree, promote the interests of the university itself, which had at all times been but a secondary institution, so that many youths of both states used to finish their studies either at Leipzig, Utrecht, or Leyden, at that time the most flourishing universities on the continent.

These causes were sufficiently powerful to bring about at length the favourite plan of establishing, within the king's Hanoverian dominions, a university to which government might pay undivided attention. The execution of this well-digested plan was intrusted to Baron Münchhausen, who then filled the office of the king's prime minister for the home department at Hanover. Of the two towns proposed as the seat of the new institution, Göttingen was chosen in preference to Lüneburg, because its healthier and pleasanter situation and its moderate size (it is but two miles in circumference, and then contained about 5000 inhabitants, which number has now increased to more than 9000) seemed to promise greater advantages. There was at that time a very strong prejudice against universities in large towns or in the capitals of states, and to this prejudice the town of Göttingen owes its present prosperity. But in other respects Göttingen afforded very inferior accommodations for the reception of the new literary colony. The only building suited to the purposes of a university was the Gymnasium, formerly a convent of Franciscan monks, and now transformed together with its adjoining church into the library.

This edifice was appropriated for the purpose of lecturing, but no other provisions were originally made either for the convenience of the students or of the professors: every one was to take care of himself as well as the state of the place would allow.

The charter granted by the German emperor, Charles VI. (January 13, 1733), confers upon Göttingen very peculiar and extensive privileges, liberties, honours, and immunities, similar to those bestowed upon Heidelberg (1386), Tübingen (1477), Rostock (1419), and lastly upon Halle (1694). Most of these privileges, especially those respecting the power of the *prorector*, viz. to create poets-laureate, to appoint notaries, &c., after having become obsolete for some time, were finally abolished by law in 1822. A short time after the imperial charter was obtained, the first course of lectures on law was opened in October, 1734, by Gebauer, who is well known to all civilians. The royal charter, granted by George II. (December 17, 1736), after whom the infant university was called *Academia Georgia Augusta*, declares the academic body independent of any other control but that of the king and his privy council, and subject to none but its own jurisdiction. The king of England is the perpetual *rector magnificentissimus* of Göttingen; and the office of principal or head is held by a *prorector*, who superintends the immediate government of the university both in judicial affairs and matters of discipline, and who is at present assisted in this capacity by two judges, a secretary, and a recorder, who together constitute the university court. The prorector is elected every six months by the professors from among their own number. The other four members of this court are permanent. It is not our intention to enter upon a detailed account of the several duties of this judicial body. It may be sufficient to observe, that the present members of this academic court, through their impartial proceedings and equitable distribution of justice, have acquired the esteem both of the university and the public at large. At the commencement of the infant institution, however, the prorector's authority alone was sufficient to manage the jurisdiction as well as the discipline, and it continued so for some time.

After the first difficulties were overcome, and some successful courses of lectures had been delivered by very able professors, on the principal branches of law and divinity for nearly three years, the university was solemnly consecrated, September 17, 1737; and consequently the time is now approaching when the hundred years' jubilee will be celebrated, for which great preparations are already making.

Göttingen was at first very slenderly endowed. The revenue proceeding from a part of the secularized monastic property was set apart by government to defray the chief expenses of the university: but considerable sums have from time to time been added to this original stock from other resources of the state; and the increase and maintenance of the numerous establishments connected with the university have often required still further sums. The professors received at first a very moderate salary, and their main security for a competent income depended on those whom they might attract by their lectures or the fame of their names.

The appointment of professors, the general superintendence and administration of the university, and consequently the exclusive right of framing all the laws and regulations for the maintenance of good order and discipline, are confided to two curators, who together with one or two privy councillors and secretaries, form an important section of the ministry for the home department residing at Hanover. There are two kinds of professorships in all the German universities—ordinary and extraordinary. The former are more or less endowed by the state, which increases the salaries according to the merits and celebrity of the teachers, from 100*l.* to 200*l.* and sometimes to 300*l.*, but rarely or never to a greater amount. These ordinary professorships are few in each of the professional faculties, viz. in divinity, law, and medicine, but more numerous in the philosophical faculty, which includes all that does not belong to divinity, law, or medicine. They are, however, numerous enough in every faculty to afford for each important branch of science or learning two or three rival chairs, in order to raise the standard of knowledge by a powerful and constant emulation. The extraordinary professors have generally no fixed salary, at least for a certain number of years. They are therefore solely dependent on their exertions as teachers, and are continually striving to secure success and to merit a chair of more certain emolument and distinction; while the ordinary professors of acknowledged reputation are constantly exerting themselves in order that they may not be surpassed by their junior competitors. Moreover there is an indefinite number of private teachers attached to each of the four faculties, who enjoy the same privileges of lecturing on any branch of science as the professors themselves. In order to become a private teacher at Göttingen, it is necessary to be a graduate in one of the four faculties of some German university, and to undergo a second examination by the faculty to which each person wishes to attach himself. It is from these private teachers that the professors are generally appointed.

But these particulars are for the most part found in other German universities, especially in those established after Göttingen, and even in such as trace their origin to times before the foundation of Göttingen. For it is a well-known fact, that the older universities of the empire, which were far inferior to the Italian and Dutch universities, have undergone a thorough reform upon the model of Göttingen. If we attempt to ascertain the causes which insured to this institution in so short a time such a superiority over all similar establishments on the continent, we shall find, that, next to the great munificence of its royal founder, it was chiefly the indefatigable zeal of Münchhausen which accomplished this end, and thus conferred the greatest benefit not only upon Germany, but upon the whole literary world.

Münchhausen had himself been educated at the three universities of Jena, Halle, and Utrecht, and had become personally acquainted with the first literary characters of his age both in Germany and Holland, which acquaintance he the more earnestly cultivated as he afterwards rose in power and influence, and was enabled to become a patron of science and learning. His clear and discriminating mind, during the long period of his academical studies, had formed a correct idea of the advantages as well as the defects in the management of universities as at that time conducted. The Dutch universities were then in a more prosperous condition than the German; and this prosperity they owed entirely to the judicious curatorial patronage of Van der Doez (Douza), who by his new constitution of Leyden had framed a model on which the younger universities of the republic were constructed. How largely Münchhausen was assisted by his own experience and literary correspondence in framing the constitution of the new seminary, and in arranging the various details which a plan so extensive necessarily embraced, may easily be conceived from the result of his labours, that is to say, from the sudden rise and progress of Göttingen. Intrinsic excellence being the sole object of the university founded under his auspices, he thought it of far greater importance to secure distinguished professors, than to issue a code of laws about teaching, or to erect magnificent colleges, or to collect expensive apparatus, or to accelerate, by any other means, a mere external prosperity, consisting in a numerous attendance of students attracted by exclusive privileges or rich endowments. His hopes, that the higher degree of learning and ability displayed by the professorial body would soon insure external success also to Göttingen, were not disappointed; and he had the satisfaction to see his lofty views fully

realized during the long period of his curatorship, which was thirty-seven years*. His comprehensive knowledge and nearly universal scholarship enabled him to select by his own choice, or by consulting the very best judges of his age, the most distinguished men for the respective departments. It was through his unbounded influence that Haller, Mosheim, Heyne, and others, were secured for Göttingen. This impartial system of curatorial patronage, which knows no other object than to promote the good of the institution intrusted to its care, and under which Göttingen soon took the highest place among the universities of Germany, has been conscientiously observed by the successors of Münchhausen; and even the older seminaries have adopted it in place of the much-abused practice of professorial recommendation. Through the application of the same principles to other universities, Göttingen has indeed begun to lose its relative superiority; but certain it is that the cause of literature and science all through Germany has been greatly benefited by the adoption of those measures by which the Georgia Augusta first gained her ascendancy.

Münchhausen felt a very strong personal interest in the success and fame of his university, and the consciousness of having essentially contributed to her prosperity encouraged him to still greater exertions. In order that the ablest teacher for a vacant chair might be procured, he generally consulted some professor, who by certain proofs of disinterestedness and impartiality had gained his confidence, and whom he thought most capable of judging rightly. That Heyne was in the full possession of his confidence, and made it a point of honour to employ it always for the welfare of Göttingen, is well known from the life of Heyne written by Heeren. But other universities have at times suffered grievously from the exclusive confidence placed in one of their members, whose recommendation has been all-powerful. This mode of election has often caused greater disgrace to universities than the appointment of colleagues by colleagues, or the patronage of individuals who are unable to judge of the true qualifications of an academic teacher. For this confidant of the ministry, if he be a man of selfish and narrow views, will hardly be inclined to recommend a professor of greater celebrity than himself, but will rather prefer an individual from whose mediocrity of talents and reputation he need not fear any diminution of his own influence. In the system of pro-

* He died in 1770, at the advanced age of eighty-three.

fessorial election there is an obvious defect, which shows itself in the appointment of brothers, sons, sons-in-law, and other relatives, who, though very excellent and worthy men, and useful members of society, may, however, fall below that standard of academic excellence which both determines and sustains the character of an institution. We do not mean to assert that Göttingen has at all times been free from the pernicious influence of nepotism. It is indeed easy for every one who knows the professorial history of this university to mention single instances of the kind: but we will venture to say, that Göttingen has hitherto suffered very little from these misfortunes, which, for some reason or other, cannot always be avoided. There is, indeed, no seminary in Europe which, within so short a space of time, can display such a list of names as those which have reflected honour on the Georgia Augusta, — a most striking argument in favour of the impartial proceedings in her academical appointments, in which the qualifications of candidates, who are often not even personally known to the electors, are taken into the strictest consideration, and the honour of the chair is conferred upon the worthiest.

But we have said enough on a good system of academic election, which may be justly considered as the principal source of academic prosperity. Within the first ten years after the foundation of Göttingen, Münchhausen had been fortunate enough to enlist in the service of the new establishment a greater amount of first rate talent, than any other seminary at that time could boast of, and that not only in one or two branches of knowledge, but in all the most important departments of human study and speculation. The several institutions attached to the practical sciences began to be gradually established, at first on a small scale, as far as the scanty means of the state allowed; and it required all the fostering care of a zealous enthusiast for the cause of science to put all those several institutions fairly in operation, and the strenuous perseverance of years was necessary before they could be considered as firmly established.

It was Münchhausen's principal aim to create a genial atmosphere for science by granting to all academical instructors perfect freedom of teaching, free research, and the unconditional liberty of the press, by which a new spirit of inquiry might be awakened and the fields of knowledge be extended. By appointing more than one professor for the same branch of knowledge, and by granting to every private teacher the liberty of entering into competition with the professors, the founders of Göttingen introduced a spirit of

emulation which does not suffer the university to become the dormitory of learning. Thus the mental energies acquire new strength from this powerful competition, which though, at first sight, it may appear as a meeting of jarring and hostile elements, is in fact nothing but "a luminous concourse of influences, tending to accomplish the grand and beneficent object of an enlightened nation."

No law interferes either with the subject or the tenor of academical lectures. No professor or teacher is obliged to follow the principles or doctrines of a certain school, or to confine his views to the narrow compass of an established text-book. Each pursues his own course as far as his abilities and knowledge allow him; and it is truly delightful to notice the progressive improvement of science in this university, and to see in how many different shapes it has been presented, each professor considering it his duty to take up a higher position, and to surpass his predecessor either in the clearness of arrangement or in the extent and acuteness of his inquiries.

With respect to the students, especially their attendance on lectures, we must premise that the original establishment of Göttingen was not encumbered with those numerous obstacles which, particularly since the reformation, have embarrassed the progress of such universities as have sprung from, and still preserve, the impress of, monastic institutions. No law compels the students of Göttingen to live within the walls of a college (for there is no edifice of this kind), or to eat their commons in separate halls, where all the college assembles at set hours appointed by statute. No regulation bids them form a class totally distinct from ordinary men, by requiring them to wear gowns of a particular colour and fashion. No stated times are set apart for discipline; no stated hours for assembling at prayers. No course of study is prescribed; and no oaths or subscriptions to certain articles of religion, as a test of orthodoxy, are required of students either at their entering the university, or during any stage of their academical course. Theology in Germany acts upon the grand principle of the reformation, to subject reason to conscience alone, and consequently to free it from all human restraint.

A student at Göttingen may live in any part of the town, take his meals wherever he pleases, and attend whatever course of lectures he thinks best adapted to the profession which he is studying, or for his general education. The average age at which German students commence their academical studies is from eighteen to twenty, and the time which

they spend in academical pursuits is three or four years. The admissibility of German students to the universities of their respective states is determined by their acquirements, or by certain definite tests of proficiency, which consist in a strict public examination by the masters of the gymnasium where they have been educated; or if they have finished their school-education in a foreign institution, they must pass their examination of maturity, as it is called, in one of the gymnasia of that state to which the university, where they intend to pursue their professional studies, belongs, or in which they propose to find an office under government after they have accomplished their academical course. Within the last ten years the education in the gymnasia has been greatly extended in nearly all the German states, especially in Prussia and Hanover, and a far higher scholarship is required from all who enter a university. The amount of this scholarship, which consists in a certain proficiency in the classics, in mathematics, in original composition, Latin as well as German, and in history, ancient as well as modern, is stated in public certificates given by the gymnasia, which are numbered, three, two, one, in an ascending order; this last certificate is only conferred upon those who merit the greatest distinction, and consequently is of very rare occurrence. This certificate of maturity is, however, only required from home students, who intend to prepare themselves for the service of the state in any of the learned professions. Those who fall short of the examination of maturity are admitted as members of the university; but they have no prospect of ever entering the service of government. We need hardly remark, that all foreigners are exempt from these regulations, and may enter the university at any time by merely producing their passports or certificates from the college or institutions where they have been educated. On doing this they are admitted to their matriculation, the fee for which is one louis d'or, or seventeen shillings. By this matriculation they acquire all the rights of home students. They have free access to, and free use of, the public library, and may pursue any course of study, or attend any lectures they like best. There is no established succession of classes, nor any compulsory attendance on certain courses or classes or recitations. All academic instruction is communicated by lectures for all the students indiscriminately; and there are no classes in which the students themselves recite their lessons from text-books, except by private request. The lectures are either public, that is, gratuitous,—or private, that is, for which fees are paid. A course of lectures lasts nearly five

months; for the academic year is divided into two equal terms or semesters. The summer-term begins regularly in the last week of April, and continues till the middle of September; the winter-term commences in the last week of October, and ends in the middle of March, so that there is a double vacation of five or six weeks each, the one in spring, and the other in autumn. Each course of lectures is generally finished in one semester, except the courses on anatomy and ecclesiastical history, which require two successive terms; others are delivered two hours a day, and finished in one semester, as those on the Pandects and on the common law of Germany. The established fee for a course of lectures delivered four or five, or even six hours per week, is one louis d'or (seventeen shillings) per term; for double hours a double fee is paid. For courses on anatomy, two and a half louis d'ors (two pounds three shillings) are paid, which includes the fee for demonstrations and for all the conveniences of dissecting. The fee for a course of two or three hours a week is one-half louis d'or (eight shillings and sixpence). The public or gratuitous lectures are generally delivered only once or twice a week. They embrace, for the most part, only secondary branches of knowledge, and are not very numerous. Most of the professors have their private lecture-rooms; but there are also public auditories for all those teachers who have none of their own. A very extensive university-building is just now erecting, which is to contain, besides several spacious auditories, a large hall for grand meetings on extraordinary occasions. It is to be finished by September, 1837, for the hundred years' jubilee of Göttingen.

There are certain courses of lectures, which, when delivered by teachers of celebrity, constantly attract crowds of hearers from all parts of Germany, particularly those in the departments of law and medicine. But this is no reason why a university should depend entirely on the demand of the public. There are other courses, especially those on the higher branches of mathematics and astronomy, which draw only a very small number of students, and are often only announced and not delivered. And yet science owes much more to these teachers, who by their profound erudition and deep research are raised above the common comprehension; and the university has far greater obligations to their names, known, indeed, but to a few admirers in all parts of the globe, than to those professors who live in the broad daylight of academic applause. Since, then, the professors

of the higher, but unpopular, branches of science cannot depend upon the fees of those who attend them, it is only just that their chairs should be better endowed than those of the more popular teachers. But even these ought to be protected against the uncertainty of chance, to which no teacher is more exposed than a professor in Germany. The statutes of apprenticeship, or the compulsory attendance on certain courses of lectures which are made a requisite condition for the subsequent admission to an examination of home-students in any of the three professional studies, have done a great deal towards effecting this, and have secured to many professors a greater number of hearers than would otherwise attend them. These are, indeed, artificial encouragements annexed to the university; but they have a very salutary influence on the mass of the students, who have still the choice between two or three instructors lecturing on the same subject.

In recording the general events connected with the rise and progress of Göttingen, we may remark, that the frequent changes in the political circumstances of the country have not occasioned any essential alteration in the constitution of the university, which, by its intrinsic excellence and efficacy, has outlived many old and venerable institutions in Germany. Since the time of the French invasion, the once illustrious names of Cologne (founded in 1388), Erfurt (1392), Wittemberg (1502), Mentz (1477), Triers (1472), and other establishments, as Ingolstadt (founded in 1472), Frankfort upon the Oder (1506), Helmstadt, Altorf (1578), Rintelen (1621), Salzburg (1623), Bamberg (1648), Landshut (1800), Dettingen (1554), Paderborn (1592), Münster (1631), Duisburg (1655), and Stuttgart (1781), have disappeared from the list of universities: but Göttingen is still, with ever-new exertions, supporting and increasing the honour and celebrity of her name, though there are now other universities in the German states, and in the Austrian empire, established on the same general principles, and all in more or less successful operation. Of these universities, six belong to Prussia—Berlin (founded in 1810), Halle (1694), Bonn (1818), Breslau (1702), Königsberg (1544), and Greifswalde (1456); six are in the empire of Austria—Vienna (1365), Lemberg (1784), Prague, in Bohemia (1348), Grätz, in Styria (1586, renewed and enlarged 1827), Pesth, in Hungary (1784), and Innsbruck, in Tyrol (1672); three in the kingdom of Bavaria,—Munich (1826), Würzburg (1403), and Erlangen (1743); two in the grand-duchy of Baden, Heidelberg (1386) and Freiburg (1457); Rostock

(1419) in the grand-duchy of Mecklenburg; Kiel (1665) in the duchy of Holstein; Marburg (1527), in the electorate of Hesse-Cassel; Giessen (1607) in the grand-duchy of Hesse-Darmstadt; Leipzig (1409) in the kingdom of Saxony; Jena (1558), in the duchy of Saxe-Weimar; and Tübingen (1477), in the kingdom of Wirtemberg, not counting now either Strasburg (1538), or the Swiss universities at Basel (1460), Zürich, and Berne.

The annals of Göttingen mention as the first memorable occurrence after the consecration of the new university, the visit with which George II. honoured his favourite Georgia Augusta, eleven years after its foundation (1748, August 1); on which occasion both professors and students displayed their feelings of loyalty and gratitude towards their royal patron. The celebrated Mosheim has described with true eloquence the solemnities of that glorious day. He reports, among the rest, that the duke of Newcastle, who accompanied the king, condescended to accept a doctor's diploma from the juridical faculty.

After this event, the two brothers of king George III., Edward, duke of York, and William Henry, duke of Gloucester, favoured Göttingen with their presence, the one in 1765, and the other in 1769; and some years afterwards (1781), Frederick, duke of York, son of George III., was received with great solemnity by the whole academic body. The three youngest princes of George III. resided at Göttingen for four years and a half, from 1786 to 1791,—Ernest Augustus, duke of Cumberland, Augustus Frederick, duke of Sussex, and Adolphus Frederick, duke of Cambridge, the present viceroy of Hanover.

During the Seven years' war Göttingen was not exempt from the calamities by which the greater part of Germany was then afflicted. More than once (in 1757—1758, and in 1760—1762) the enemy took possession of the town, which was fortified, and even experienced a blockade in 1760, under Marshal Broglie. But neither did he, nor any other French commander, in the least violate the constitution of the university, annoy the academic body, or injure any academic establishment. The lectures, of course, were interrupted, and the town was continually harassed by the French troops during that turbulent period; but the houses of the professors were, by a special order of Dumuy, protected against all military outrage.

Forty years afterwards, when the Prussians occupied the town of Göttingen, the university sustained but a very slight shock, receiving from the new rulers the most uncondi-

tional assurances of the unmolested continuance of its academic establishments. The Prussian garrison, however, occupied the town for eighteen months, at two different times, in 1801 and 1806.

Of a more threatening aspect was the two-fold French invasion which subjected Göttingen to the arbitrary sway of Napoleon, first from 1803 to 1805, and then from 1807 to 1813, during which latter period Göttingen formed part of the kingdom of Westphalia, the capital of which was Cassel, where King Jerome Napoleon resided. At first the most flattering promises of safety and protection were given by Bonaparte, who, in a letter written by Berthier, and addressed to Heyne, explained his sentiments in the following terms :—‘ *Le premier Consul sait apprécier les services que l’Université de Göttingue a rendus aux lettres et aux arts, et les droits qu’elle s’est acquis à la reconnaissance des savans. Que le bruit des armes n’interrompe pas vos paisibles et utiles occupations ! L’armée françoise accordera une protection spéciale à vos établissemens ; son Général en a reçu l’ordre et aura un grand plaisir à l’exécuter.*’—Of nearly the same import is the letter written by Talleyrand to the University. During the reign of Jerome, however, two Universities of the kingdom, Helmstadt and Rintelen, were annihilated ; and great fears were at that time entertained lest a similar fate might befall Göttingen. But John Müller, the historian, who was then the curator of the University, frustrated, through his powerful eloquence, the hostile measures intended against his alma mater, who once (1769—1771) had inspired the young historian with that lofty spirit, which posterity will ever admire in his writings. What Müller and his successor Leist (now residing at Stade) did for the maintenance and improvement of the academic institutions during their short administration at Cassel, merits the warmest acknowledgment from their country.

The expulsion of the French, and the subsequent dissolution of the kingdom of Westphalia in 1813, only partially interrupted the academic courses. More than eight hundred students of Göttingen had joined the allied forces, and assisted in gaining the decisive victory over the French. Charles. Frederick Eichhorn, son of the great theologian Eichhorn, then professor at Berlin, took up arms, and returned after the conclusion of the war, covered with marks of honour from the Emperor Alexander and the King of Prussia.

Since the restoration of the Hanoverian sceptre to its legitimate ruler, George III., Göttingen has again enjoyed the

superintendence of high-minded curators. Whoever has noticed the numerous improvements made in almost every institution connected with Göttingen, the pearl of the Hanoverian kingdom, and the care taken in the selection of an able body of professors, will acknowledge the wise and paternal care of Baron Arnswaldt and Strahlenheim, the present curators, both highly distinguished for their extensive erudition, and endowed with all the qualifications of sober and impartial judges of true learning.

Göttingen was visited by George IV., October 30, 1821. The University was then in a very flourishing state and exhibited a truly magnificent spectacle, when the whole academic body was presented to his majesty in the large hall of the library. Many favours have since been conferred upon the several establishments, both by George IV., and more recently by William IV. The number of students in 1823 rose to upwards of 1550, which number continued during the succeeding years till 1831, when after the unfortunate revolutionary movement, it was suddenly reduced to eight hundred: the number has now again increased to nearly nine hundred. During the long period from 1734 to 1816, it is only in the years 1779—1782 that the official lists record nearly nine hundred and fifty; the average number before this time was from six hundred to eight hundred and fifty. Even the very first year, 1735, the celebrity of the first professors attracted about three hundred and fifty hearers; and, as early as 1766, the number had increased to more than six hundred. But in 1816 Göttingen, for the first time, numbered one thousand students; nearly half of whom were foreigners, that is, such as did not belong to Hanover.

We shall conclude this general historical sketch with an account of the four faculties and of the present professors and teachers, and of the establishments attached to each of them. Each faculty has the right of conferring degrees in its particular department. The theological faculty creates only *Licentiates of Theology*, which degree is taken, after a previous examination, by such candidates as wish to become private teachers in the University. The honorary title of Doctor of Divinity, corresponding to the same title in England, is also conferred by the faculty. But the Consistory at Hanover examines and appoints the candidates for the established (Lutheran) church of the kingdom. The legal faculty examines the candidates for the degree of *Doctor of Civil and Canon Law*, (*utriusque juris*), which title is not at present made a requisite condition in candidates for legal offices or for the practice of law, except in some of the Han-

seatic towns, and in universities for becoming a private teacher. It is, however, a title of distinction aspired to by many. The right of practising law is obtained after an examination by the Supreme Court at Celle. The appointments to the District Courts and Courts of Chancery are made by the government at Hanover, which has named a committee to examine into the qualifications of the young candidates, who first become auditors, then assessors, &c. The inferior offices of the town courts are filled by candidates who are declared sufficiently qualified by their respective Courts of Chancery, of which there are eight in the kingdom. The medical faculty creates Doctors of Medicine; and this degree is indispensable for all who wish to be admitted to practise their profession: this permission is obtained after a second examination by a committee at Hanover. The *promotions* in this faculty are the most numerous of all. The philosophical faculty confers the degree of *Doctor of Philosophy and Master of Arts*, after an examination either in the classics and ancient history, or in mental philosophy, or in politics and modern history, or in mathematics, or in the natural sciences. The promotion to any one of these four degrees of the four faculties requires, besides the private examination, a public disputation, for which the candidate chooses his own opponents from among the students and doctors of the University, and for which the philosophical faculty alone has the right of appointing permanent assessors in addition to the opponents chosen by the candidate. The dean of the faculty presides on these occasions: his office is annual, by rotation among the members of the faculty, which consists of three in theology, of four in law, of five in medicine, and of eight in philosophy. The *Senatus Academicus* is composed of nine or ten ordinary professors, chosen, for an indefinite time, from all the four faculties; and four of these (one from each faculty) form a committee of the University Court, on extraordinary occasions.

The academic establishments may be divided into such as are designed for the use of the *whole* University, and such as are connected with *one* of the faculties. Of the first class there is but one institution which may be properly considered as such, and which is, at the same time, the most useful in Göttingen. We mean the Library. Of this, a former Number of the Journal of Education (No. IV.) has given a detailed account, to which we now refer our readers. The several institutions of the second class are best specified under the description of the several faculties

to which they belong. We begin with the theological faculty, as being the first in rank.

ORDINARY PROFESSORS OF DIVINITY.

Dav. Jul. Pott.—(Exegesis of the Old and New Test., homiletics and Hebrew grammar; two courses per semester.)

Chr. Fred. Lücke.—(Exegesis of the New Test., Christian ethics, dogmatics, and apologetics; three courses per semester.)

Char. Lud. Gieseler.—(Ecclesiastical history and dogmatics; two courses per semester.)

John Th. Trefurt, Rector of St. John's Church.—(Catechetics and pastoral or practical theology; two courses per semester.)

EXTRAORDINARY PROFESSORS OF DIVINITY.

Geo. Reiche.—(Exegesis of the New Test., introduction to the New Test. and history of Christian dogmas; three courses per semester.)

Jul. Mueller, Minister of the University Church.—(Practical theology; one course per semester.)

Fred. Will. Rettberg.—(Ecclesiastical history and dogmatics; two courses per semester.)

PRIVATE INSTRUCTORS IN DIVINITY.

Geo. Chr. Matthaei.—(Exegesis of the New Test., and introductory lectures to the holy scriptures; two or three courses per semester.)

Edw. Koellner.—(Exegesis of the New Test.; one course per term.)

Rud. Ern. Klener.—(Exegesis of the Scriptures and Hebrew grammar.)

Ferd. Piper.—(Exegesis of the Old and New Test.)

Will. Fraatz, Minister of St. John's Church.—(Dogmatics.)

There are several seminaries connected with, and superintended by, the theological faculty, for the purpose of instructing such students as have already, for at least two years, attended the Courses on Exegesis, Church History, Christian Ethics, and Dogmatics, &c. These students are instructed in pastoral theology, *viz.*, in the performance of their duties as future ministers of the Lutheran church, such as preaching, catechising, and liturgical exercises. The Royal *Homiletical Seminary*, as it is called, has for these last thirty years been directed by Mr. Pott, in a manner most conducive to practical utility. Another institution, for the practice of catechising, &c., has been managed, for nearly the same period,

with equal skill and ability by the Rev. Mr. Trefurt, first dignitary of the church. There are, besides, several private societies for the discussion of theological subjects, superintended by professors and private teachers.

The time devoted to the study of divinity is three years; but another year is generally added to this *triennium*, which the law requires of home students, before they are admitted to the first of the three successive examinations before the Royal Consistory at Hanover. Eight or ten years generally elapse after leaving college, before a candidate is admitted to his last examination, previous to his being settled as minister. This intermediate time is spent by most of them in rich families who have occasion for private tutors.

Most of the various lectures on divinity are delivered every semester by more than one teacher: a few recur only every other semester or once or twice in three years. They embrace all the exegetical, historical, and doctrinal parts of Christian faith, and consist of about eighteen successive courses, *viz.*, an *encyclopædia*, or concise view of all the branches of theology, with reference to their sources and their different systems; four successive courses on the principal parts of the New Testament, and as many on the Old Testament; an introductory course on the history of the scriptures; an historical view of the dogmas of Christianity; a philosophical discussion of the Christian dogmas; two or three courses on ecclesiastical history; one course on Christian ethics; a comparative view of the different creeds of the principal Christian sects; and, lastly, two courses on practical theology.

The professor of oriental languages, though he belongs to the *philosophical* faculty, yet delivers for the most part *theological* lectures. Göttingen has at all times been distinguished for her oriental scholars. We need only mention the names of Wähner (1738—1762), of the two Michaelis, the latter of whom filled the chair for forty-five years (1746—1791), of Eichhorn (1788—1826), of Tychsen 1784—1834), and now of Ewald, whose grammars of the Hebrew and the Arabic languages are known wherever oriental literature is studied. Ewald's Hebrew grammar will shortly appear in an English translation, with many original additions of the author, by Mr. John Nicholson, A.B., Oxford. The three professorships of divinity were first conferred on Heumann, Oporin, and Magnus Crusius, who, though now but rarely mentioned in the learned world, were the most celebrated theologians of their age. Among their successors, Mosheim was the greatest ornament of Göttingen from 1747 to 1755; during which period he was also appointed Chan-

cellor of the University, an office which has never been conferred upon any other person. After Mosheim we may mention the names of Walch, Koppe, Heilman, Schleusner, Ammon, Stäudlin, and the two Ranks, whose academical services and literary efforts will always be kept in grateful recollection. Nor are the present teachers of the Christian faith less distinguished for their mental energy and profound erudition, which are proved by a series of the most valuable works on the various exegetical, historical, and doctrinal branches of divinity.

ORDINARY PROFESSORS OF JURISPRUDENCE.

Gustav. Hugo.—(Introductory lectures to the study of law, institutes and history of the civil law ; three or more courses per semester.)

Ant. Bauer.—(Criminal law, institutes, law of Nature and encyclopædia of law ; three courses per term.)

Fred. Bergmann.—(The various branches of practical Jurisprudence and the law of Hanover ; two or three courses per term.)

John Fred. Goeschen.—(Institutes, history, and pandect of the Roman law, and law of inheritance ; three courses per term.)

C. F. Mühlenbruch.—(Institutes and pandect of the Civil law ; two courses per semester.)

Will. Edw. Albrecht.—(Common law of Germany, ecclesiastical law, and German public law ; two courses per semester.)

Geo. Jul. Ribbentropf.—(Institutes, pandect, and history of the Roman law ; two courses per semester.)

EXTRAORDINARY PROFESSOR OF JURISPRUDENCE.

Will. Theod. Kraut.—(Common law of Germany, ecclesiastical law, public law of Germany and history of the German law ; two or three courses per semester.)

PRIVATE TEACHERS OF JURISPRUDENCE.

J. G. Quentin.—(Law of Hanover and Prussia.)

C. Fred. Rothamel.—(Feudal law and pandect of the civil law.)

C. J. Meno Valett.—(Institutes and pandect of the civil law, and theory of legal process ; three courses per semester.)

C. Edw. Moebius.—(Ecclesiastical law and institutes of the civil law.)

S. Benfey.—(Civil law and theory of legal process.)

Henry Zachariae.—(Criminal law, theory of legal process and law of Brunswick ; two courses per semester.)

Fr. B. Grefe.—(Law of Hanover and legal process ; two courses per semester.)

G. Fr. Schumacher.—(Law of Nature and encyclopædia of jurisprudence.)

Henry Thöl.—(German common law, mercantile law, and practice of legal process in Germany.)

Ag. Wunderlich.—(Theory of legal process, and pandect of the civil law.)

H. Richelmann.—(Institutes and history of the Roman law, and theory of legal process.)

A. Zimmermann.—(Private instruction in various branches of jurisprudence.)

From this list it is sufficiently evident what large provision is made at Göttingen for the study of law. The successive courses, generally followed by home students for at least three years, are, 1. an introduction to the study of jurisprudence, or an encyclopædia of all the branches of the present law-system; 2. institutes of the civil law; 3, 4. a double course on the pandect of the civil law, according to its present application; 5. history and antiquities of the civil law; 6. literary history of the civil law since Justinian; 7. of canon and ecclesiastical law; 8. feudal law; 9, 10. a double course on the German common law; 11, law of Hanover and Brunswick, and Nassau, in three different courses; 12. criminal law; 13. mercantile and maritime law; 14. law of nature and philosophy of law: this course is also delivered by the two professors of moral philosophy; 15. international law; 16. public law of the German confederacy; 17. practical jurisprudence, or an introduction to judicial procedure combined with exercises and decisions upon written law records or minutes (for there is no jury in Germany), which the professor communicates to his hearers; 18. an introduction to the use and management of written law records, in stating a particular case and forming a decision upon it. Besides these professional lectures, which recur, for the greater part, every semester, the law-students attend also the auxiliary courses on medical jurisprudence, on history, statistics, politics, moral philosophy, belles-lettres, natural philosophy and mathematics, most of which are enforced upon them by statutes of apprenticeship.

Formerly there were only five ordinary chairs of jurisprudence, now increased to seven, which are filled by men whose names are familiar to the learned civilians and lawyers of Germany. Hugo's celebrity is acknowledged by English lawyers of distinction; and it is well known how greatly the study of the civil law has been improved by Goeschen, the discoverer and first editor of Gaius*. Mühlenbruch enjoys the well-established reputation of a first-rate lecturer on the pandect, only rivalled by Savigny of Berlin, and Thibaut of

* First edition, 1820; second edition, 1824.

Heidelberg. One of the most successful teachers of the criminal law is Bauer, who is esteemed also as an able writer on the branches of jurisprudence which he teaches. But the most useful and most active member of the faculty is Bergmann, professor of practical jurisprudence.

The lustre which the past generations of law professors reflect upon Göttingen is hardly less brilliant than the splendour of the present day. For what erudite civilian of Europe is unacquainted with the names of Gebauer and Spangenberg; or what student of German law does not acknowledge the paramount influence which the two Meisters and Wahl, and Schmauss, and Riccius, and Boehmer, and Pütter, and Clap-roth, and Runde, and in our days Eichhorn the younger, Blume, and many others, have exercised on the legal studies of Germany?

In describing the legal faculty of Göttingen, we must not forget the Court of Equity, which is not confined to the town or the kingdom of Hanover, but is open to every person in Germany who wishes to take its judicial advice. This Court consists of a president, (at present Bauer,) four senior members, and as many junior members (generally six) as government thinks proper to appoint. They meet once a week to give legal advice and to decide upon cases, both civil and criminal, transmitted to them in the shape of legal minutes from all quarters of Germany, especially from the northern provinces and the Hanseatic towns. Their decisions are considered as completely impartial, not proceeding from a prejudiced view of the case, or from a narrow knowledge of the law, but founded on an exact and comprehensive discussion of the matter in question. The remuneration of this honourable body consists merely in the fees paid by the contending parties. The exertions of this judicial establishment as such are unconnected with the University; but they afford, especially to the junior members, ample opportunities for the practice of law; and their impartial decisions have essentially contributed to the great fame which the legal faculty of Göttingen has always enjoyed.

ORDINARY PROFESSORS OF MEDICINE.

John F. Blumenbach.—(Natural history, physiology, and comparative anatomy; two courses per semester.)

Charles Himly.—(Nosology and therapeutics, materia medica and clinical demonstrations; two courses per term.)

Henry A. Schrader.—(General botany, anatomy, and physiology of plants, medical botany; two courses per term.)

C. J. M. Langenbeck.—(Anatomy in several courses on osteology

and syndesmology, neurology, &c., anatomical demonstrations, dissecting, ophthalmology, double courses on surgery, and practical surgery; five courses per semester.)

Fred. Stromeyer.—(Chemistry, pharmacy, and zoochemistry; two courses per semester.)

J. W. Henry Conradi.—(Encyclopædia of medicine, pathology, therapeutics and practice of medicine; two or three courses per semester.)

C. F. H. Marx.—(Pathology and therapeutics in double courses each semester.)

Edw. C. J. Von Siebold.—(Obstetrics, both theoretically and practically, medical jurisprudence; two courses per term.)

Jo. Fr. Osiander.—(Obstetrics, diseases of women and children; two courses per semester.)

EXTRAORDINARY PROFESSOR OF MEDICINE.

E. A. Will. Himly.—(Physiology and medical surgery.)

PRIVATE TEACHERS OF MEDICINE.

L. A. Kraus.—(Encyclopædia of medicine, materia medica, pathology, and therapeutics; three courses per semester.)

J. A. Pauli.—(Syndesmology and operations on the teeth.)

E. Fred. G. Herbst.—(Physiology and pathological anatomy.)

A. A. Berthold.—(Physiology, comparative anatomy, general anatomy and zoology; three courses per semester.)

John Will. Conradi.—(Materia medica, on mineral waters.)

J. H. Ch. Trefurt.—(Obstetrics, both theoretically and practically.)

The venerable head of the medical faculty is Blumenbach, who has now for more than fifty-eight years extended the boundaries of science, and spread his own fame and that of the University over the greater part of our globe. His vigorous old age (he was born May 11, 1752) is still imparting to youth the warm enthusiasm for scientific research which has animated his own long and active life. May he long continue to bless with his presence that University, which is as much indebted for its celebrity to his immortal efforts in literature and science, as it formerly was to those of Haller, his noble predecessor, a man of gigantic mind, and still more gigantic acquirements.

In taking a general view of the medical literature, which owes its origin to the genius and learning of Göttingen professors, we cannot but express our admiration at the great number of standard works published since the foundation of the University, on pathology, therapeutics, materia medica, &c., particularly by the two Richters, Brendel, Schroeder, Matthiae, Baldinger, &c., in former times, and now in a far

higher degree of excellence by Conradi, Marx, &c. Himly maintains a distinguished rank among the medical professors and practitioners of Germany, and has been particularly successful in his treatment of the diseases of the eye. But it is more in anatomy and surgery, than in any branch of medicine, that Göttingen can produce the most decisive proofs of superior talent. There are few in our days who can rival the anatomical and surgical excellence of Langenbeck, of whom it is difficult to say whether his practical skill, which he has so often exhibited in the most desperate cases, or his usefulness and success as a teacher, or the numerous literary efforts by which he has illustrated the subjects of his lectures, most deserve our admiration. His late colleague Hempel, and his predecessors Wrisberg, Haller, Albrecht, &c. have likewise filled the chair with as great honour to the University as credit to themselves. The three men who followed each other in the professorship of chemistry, Segner, Vogel, and Gmelin, who were also well versed in mineralogy, and other branches of natural science, are now succeeded by Stromeyer, who is well known to the learned chemists of all countries by his various important discoveries. His lectures are well attended, and afford the most satisfactory information. The department of botany is superintended by Schrader and Bartling, who were preceded by Hoffmann, Murray, Büttner, and Zinn, the first who arranged the botanical garden.

The department of obstetrics and medical jurisprudence has, since 1831, been intrusted to Edw. Von Siebold (formerly professor at Marburg and Berlin), who, by his extensive acquirements and the worth of his personal character, maintains the well-deserved reputation of his father, who was first professor at Wirzburg and then at Berlin, where he died in 1826. The medical sciences are indebted both to father and son for the publication of one of the best German periodicals on midwifery, and for many other valuable manuals and treatises on the same subject. Among the predecessors of Edw. Von Siebold, medical students respect the names of Mende, Oslander the elder, Fisher, Wrisberg, and Roederer.

The successive courses which the medical students generally follow for four years, are, 1. an encyclopædia, or general outline of all the branches of medicine, their study and literature; 2. a double course on anatomy; 3. comparative anatomy; 4. physiology; 5. pathology, or nosology, both general and special; 6. materia medica; 7. therapeutics; 8. on the diseases of women and children; 9. pharmacology; 10. botany; 11. anatomy and physiology of plants; 12. chemistry;

13. obstetrics ; 14. forensic medicine ; 15. surgery ; 16. practice of medicine and surgery, by attending the different infirmaries, dispensaries, and other clinical institutions ; 17. veterinary art.

The most important as well as the most expensive establishments are attached to the medical faculty. We shall not discuss the comparative usefulness of each of these institutions. We take it for granted that without their existence the study of the healing art would be greatly deficient, and could not be carried to that degree of perfection which its practical importance renders indispensable. Other medical seminaries of Europe may have larger hospitals, and afford ampler means for observing a greater variety of cases, especially such schools as are established in large towns, like London, Paris, Vienna, or Berlin ; but with respect to the judicious management of these institutions, both on the part of government, and of those to whose care their immediate superintendence has been intrusted, and with respect to their practical utility, Göttingen has, of late years, acquired a very distinguished rank. In the first place, we speak of the

ANATOMICAL THEATRE.

At first, the vault of an old watch-tower in the town-wall, near the eastern or St. Alban's Gate, was appropriated for dissecting and anatomical demonstrations. It was in this obscure tower, which is now destroyed, that the first professor of anatomy, Albrecht, delivered his courses (from Dec. 1734 to Jan. 1736) ; but the disgrace attached to his profession in the eyes of the then rude inhabitants of Göttingen, and the insults to which he was exposed in consequence of this prejudice, broke the poor man's heart. Through the influence of the great Haller, who succeeded Albrecht in 1736, an anatomical theatre was constructed (1738) on the northern boundary of the town, adjoining the botanical garden. Here Haller and his successors have taught and enlarged the boundaries of their science. Here also the present professor of anatomy, Langenbeck, performed the duties of his office from 1804 to 1829, in which latter year the new anatomical theatre, on the west side of the town, was finished. It is situated on the fore part of an extensive meadow, and presents a fine front to the most beautiful street of the town. This magnificent edifice was commenced in April, 1828, and the first course of lectures was delivered in it in the winter-term of 1829. It measures one hundred and eighty feet in front : the vestibule is supported by six large Doric columns, and forms a beautiful

entrance into the rotunda, where the lectures and anatomical demonstrations are given. This rotunda, which contains three hundred seats for students, has been an object of admiration to all intelligent strangers. Each wing of this edifice contains three spacious rooms: those of the right wing are appropriated to dissecting and making preparations; and those of the left wing contain a very superior collection of anatomical preparations, scientifically arranged in glass vessels and cabinets. This valuable museum is greatly indebted to the enthusiastic zeal of Langenbeck, who for more than thirty years has been employed in collecting the greater part of the specimens showing the different parts of the human body, both in a sound and a diseased state. They are, of course, produced during the lectures for the purpose of explaining the structure, physiology, and diseases of the human body. With respect to dissecting, there are such regulations made by government as insure to the anatomical theatre about a hundred subjects a year, in order to facilitate and encourage the study of this important branch of human knowledge.

BOTANICAL GARDEN.

The memory of Haller is also connected with the botanical garden, which was laid out under his active co-operation in 1739 along the ramparts of the northern frontier of the town. Haller's extensive correspondence with the greater part of the literary world soon procured for this new establishment a great variety of the rarest plants, especially from Switzerland and Spain. It is not our intention to enlarge upon the gradual progress and improvement of this garden from the time of Haller to the present day. Its original size has been more than tripled, and more than six times the number of specimens, and among these such plants as grow in the remotest parts of the globe, have since been introduced into it, and into the hot-beds and spacious green-houses attached to the garden. These green-houses, which are built in a magnificent style, and present a front of two hundred and thirty feet, are divided into three partitions, affording an artificial temperature for the plants of the hot, cold, and tropical climates, which three partitions are designated by the names Calidarium, Frigidarium, and Tepidarium. Each of these divisions contains several rooms; so that there are now four hot, three tepid, and two cold ones. But it is only since 1809 that these and other improved arrangements for the preservation of rare and foreign plants have been introduced.

The plants are still arranged according to the Linnæan system; but preparations are now making to introduce a

new arrangement, according to natural families. Under Büttner's superintendence (1760—1768), the garden contained about two thousand different specimens. Zinn, the predecessor of Büttner, during the short period of his office, (1753—1759), did a great deal towards improving the establishment; and the two next successors to Büttner, Murray (1769—1791), and Hoffmann (1792—1802), increased the number of specimens to three thousand. But it is particularly through the unremitting activity of Schrader that since 1802 the most salutary improvements, with respect to the economy of the whole establishment, and to the culture of plants, have been introduced. His first and principal aim was, to arrange the plants systematically, and to draw up scientific catalogues of such specimens of plants and seeds as might be disposed of, or exchanged for other specimens found in similar gardens of Europe. This method of exchange has in a short time enriched Göttingen with a great variety of vegetable productions from every part of the globe. The bounty of princes also and the liberality of distinguished travellers at different times have largely contributed to the increase of the garden. The botanical results of nearly all the voyages round the world and of travels into unknown countries have been secured to Göttingen, so that the garden can now exhibit nearly eleven thousand specimens of vegetable productions. Particular attention has at all times been paid to officinal and horticultural plants, for the cultivation of which there was, till very lately, a separate garden on the southern boundary of the town. But in 1830 the plants were transferred to the enlarged grounds of the botanical garden, which now occupies the whole northern and a part of the eastern boundary of the town, and must be considered as an honourable memorial of the ardour with which the science of botany is cultivated in Göttingen. The most appropriate conservatories have of late been added, ponds for the aquatic plants have been formed, and other conveniences are continually making.

LYING-IN-HOSPITAL.

An institution for the practice of obstetrics was, through Haller's influence, first established in 1751. Two professors, Roederer and Wrisberg, succeeded each other in superintending the same, the former till 1764, and the latter till 1785, when the old edifice was demolished, in order to erect on the same spot a new one, which was commenced in September, 1785, and opened for the reception of females in 1791. A private building in the intermediate time (1781—1791)

was appropriated to the practice of midwifery, and committed to the care of professor Fisher, who, in 1792, was succeeded by Osiander, the first who superintended the new institution. It is situated on the south-west corner of the town, and affords a fine view to those passing it on the elevated walk of the ramparts, which surrounds the whole town in a circular form, and is lined with noble lime trees. The edifice forms a square, with projecting wings; its length is one hundred and fourteen feet, and its breadth ninety. It is three stories high: the lowest is occupied by the manager of economical affairs, by such females as are learning the practice of obstetrics, and by the midwives and domestics. All the rooms of the middle story are appropriated to the practice of obstetrics, and contain superior accommodations for this purpose. The institution can supply sixteen beds at a time for the relief of such females as apply for admission. Besides operating as a useful and important charity, this institution gives medical students the opportunity of observing the practice of the professor, who resides in the upper story, and delivers all his lectures in the institution itself, which contains an extensive apparatus of instruments, &c., for more difficult cases. The number of births which take place every year is from eighty to one hundred. Osiander, the first director of this establishment, died in 1822. His chair was filled by Mende, who died in 1831. The present professor, Edw. Von Siebold, has since that time conducted the same department with great ability, and to the satisfaction of all competent judges.

INFIRMARIES AND PUBLIC DISPENSARIES.

The first infirmary for the practice of medicine and surgery was established in 1780, and superintended by Richter, late professor of anatomy and physic. But as the building appropriated for this purpose afforded very few rooms for the reception of patients, it was resolved to transform the masonic hall into a more spacious and convenient hospital, for which purpose the fraternity of Freemasons presented their edifice and their capital. This institution owed its existence and good regulations to the exertions of Richter, who conducted it from 1787 to 1803. There were during this time several dispensaries in Göttingen, both public and private, under the care of respectable physicians. But these clinical institutions, as well as the infirmary of Richter, were united in 1803 by Himly, who has published a detailed account of his improved plan for relieving the poor when subject to chronic or tedious diseases, for affording to his students an opportunity of visit-

ing patients, and introducing them to the practice of medicine. The admirable manner in which this united establishment was managed, and the superior conveniences for both patients and students, soon secured to it the confidence of the public. The number of patients, especially of such as laboured under diseases of the eye, whom the celebrity of Himly had attracted even from distant parts of Germany, now began to require more room than the masonic hall could afford. A larger edifice was therefore selected, in 1809, to serve the purpose of an hospital, which has the additional advantage of being next to the professor's own private residence. The dispensary connected with this hospital embraces not only the town of Göttingen, but also several villages within a circuit of five miles round Göttingen; and the average number of patients treated in this clinical and polyclinical institution, is from two hundred and fifty to three hundred and fifty a year, of whom sixty or seventy are generally received into the hospital itself.

Another infirmary for the practice of surgery and for the treatment and cure of diseases of the eye, which may be considered as an excellent addition to the system of medical education at Göttingen, was established by Langenbeck, one of the first operators of our age, in 1807, enlarged in 1809, and again improved in 1811. The surgical intrepidity of this active professor has served as an example to many an aspiring pupil, and has been of paramount benefit to the country—which may be most satisfactorily proved by reminding our readers of the disastrous times of 1813, when the military hospitals of the king's Hanoverian troops were attended by the most experienced surgeons formed under the instruction of Langenbeck, who was himself appointed Surgeon-General of the Hanoverian army. The patients received into the Göttingen hospital vary annually from two hundred and fifty to two hundred and ninety. The edifice possesses, among other advantages, that of being situated in an open and healthy place on the western boundary of the town, and of being connected with the private dwelling of the professor.

Besides these two infirmaries, there is another dispensary or polyclinical establishment, under the able direction of Conradi, who founded it in 1823, on his arrival in Göttingen from Heidelberg, where a similar institution had been committed to his care, after he had been called to that University from Marpurg.

In describing the medical establishments of Göttingen, we cannot omit the veterinary institution founded and conducted by Dr. Lappe, who delivers several excellent courses of lec-

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tures on the various branches of zootomy, and on the diseases of cattle, and the means of curing them. The hospital for sick animals is situated on the west side of the town in an open plain not far from the new anatomical theatre. It is both spacious and well managed. The lectures are given in the hospital itself, and embrace three courses per semester.

CHEMICAL LABORATORY.

During the first fifty years after the foundation of the University, chemistry was considered only a secondary branch of medicine, and as such was not taught by a professor expressly appointed for that purpose. Lectures on chemistry were then given in private establishments by Vogel, professor of the practice of physic, and by Büttner, professor of botany. The first professor of chemistry was J. F. Gmelin, by whose advice a public laboratory was erected in 1743 on the south frontier of the ramparts. After 1792 it was furnished with all the numerous and improved instruments which the new impulse given to this science by the important discoveries of Lavoisier had rendered indispensable. But after the death of Gmelin, in 1804, the laboratory again experienced a thorough reform, according to a far superior plan laid down by Stromeyer, who succeeded Gmelin. Chemical science was then making such rapid and important advances as to render necessary both an enlargement of the laboratory and an increase of the apparatus. The whole institution was accordingly raised to a footing of equality with any similar establishment in Germany, and now possesses not only every thing necessary for the illustration of the theoretical lectures by a series of the most interesting experiments, but also affords, consistently with its principal object, to chemical students an opportunity of learning the practical part of the science, and provides the professor with all the means of improving and enlarging its boundaries. The exertions of Stromeyer have in no inconsiderable degree contributed to the reputation which the chemical lectures of Göttingen have acquired both for the general knowledge they convey, and for the neatness with which the different experiments illustrative of the truths of chemistry are performed. It is in this laboratory that the several important discoveries well known to the chemists of Europe have been made by Stromeyer, who has rendered this study extremely popular in Göttingen.

ORDINARY PROFESSORS OF THE PHILOSOPHICAL FACULTY.

Jer. Dav. Reuss, Head Librarian.—(Literary history.)

Ch. Will. Mitscherlich, Professor of Poetry and Eloquence.—
(On Greek and Roman classics; one course per semester.)

A. H. L. Heeren.—(Universal geography and ethnography, statistics of Europe and America, and ancient and modern history ; three courses per semester.)

Cha. Fr. Gauss.—(Mathematical astronomy, practical astronomy, on magnetism.)

Jo. Fr. Lud. Hausmann.—(Geology, mineralogy, technology, and mining ; three courses per semester.)

Geo. Fr. Benecke, Librarian.—(On the English language and on the ancient German literature.)

C. Bunsen, Second Librarian.—(German language, and the Italian and Spanish languages, physical geography.)

Lud. Dissen.—(Encyclopædia of philology, Roman antiquities, Greek and Roman classics.)

Soulange Artaud.—(French language and literature.)

Cha. Olfr. Müller.—(Archæology of the fine arts of Greece and Rome, Greek antiquities, mythology, Greek and Roman authors ; two or three courses per semester.)

A. Wendt.—(Moral philosophy, logic, metaphysics, psychology (mental philosophy), history of philosophy, law of nature, æsthetics or philosophy of belles lettres, and the fine arts ; two or three courses per semester.)

F. C. Dahlmann.—(Politics, modern history, ancient history, history of Germany, political economy ; three courses per term.)

James Grimm, Librarian.—(German grammar, history of German literature, diplomatic palæography.)

G. C. J. Ulrich.—(Pure mathematics, analysis of finite quantities, and analytical geometry, practical geometry, differential and integral calculus, higher mechanics ; three courses per semester.)

Charles Hoeck, Second Librarian.—(Roman antiquities and ancient history ; one course per semester.)

Geo. H. Aug. Ewald.—(Exegesis of the Old Testament, biblical archæology, encyclopædia of the East, Hebrew, Arabic, and Sanscrit languages ; three courses per semester.)

William Weber.—(Natural philosophy, every semester.)

Geo. Fr. W. Meyer.—(On the cultivation and improvement of the forests ; one course per semester.)

Jo. Fred. Herbart.—(Encyclopædia of philosophy, logic, metaphysics, mental philosophy or psychology, ethics and law of nature, pædagogics ; three courses per semester.)

EXTRAORDINARY PROFESSORS OF THE PHILOSOPHICAL FACULTY.

William Grimm, Second Librarian.—(On the ancient poems of the Germans ; one course per semester.)

F. Th. Bartling.—(Botany, in several courses, medical botany, horticultural botany ; three courses per semester.)

Cha. Oesterley.—(History of the fine arts, painting, statuary, and architecture.)

PRIVATE TEACHERS OF THE PHILOSOPHICAL FACULTY.

Geo. H. Bode, Assessor to the Faculty, and Assistant Librarian.—(Encyclopædia of philology, history of Greek and Roman literature, Greek and Roman classics ; two courses per semester.)

Cha. Beutler, Assessor to the Faculty.—(Greek, history, and Roman antiquities.)

Ern. Lud. Von Leutsch, Assessor to the Faculty.—(History of Greek and Roman literature, Greek and Roman classics.)

Geo. W. Boehmer, Librarian.—(General politics, philosophy of the criminal and ecclesiastical law.)

Fr. W. Schrader.—(Civil architecture, practical geometry.)

Focke.—(Mathematics and geometry.)

Alb. Lion.—(Greek and Roman authors.)

F. A. G. Heinroth.—(Theory of Music.)

H. G. Koehler.—(Pure mathematics, mathematical jurisprudence, civil architecture.)

Theod. Benfey.—(Latin grammar and the Sanscrit language.)

Aug. Will. Bohtz.—(Æsthetics or philosophy of belles-lettres and the fine arts, philosophy of religion, psychology ; one or two courses per semester.)

M. Stern.—(Higher mathematics, popular astronomy, practical mathematics ; one course per semester.)

Andr. Thospan.—(Modern history and statistics.)

Henry F. Wüstenfeld.—(Exegesis of the Old Testament, Hebrew and Arabic grammar ; two courses per semester.)

B. Goldschmidt.—(Pure mathematics and stereometry, analytical geometry, astronomy, optics.)

Aug. Bernh. Krische.—(History of ancient philosophy, Greek and Roman authors.)

Robert Bunsen.—(Chemistry applied to the arts, toxicological chemistry, stoichiometry.)

The professor of poetry and eloquence in every German university is required to officiate as Latin orator at all the great festivals of the university, as, the jubilee of professors, &c., and in Göttingen (since 1785), on the 4th of June every year, at the proclamation of the prizes given by government for the best essay on a certain scientific subject proposed by each of the four faculties, and for the best sermon on a given text. Besides, this professor writes the Latin prefaces to the semiannual prospectus of the university, and announces the new prorector every six months by a program or short treatise on some difficult point of antiquity ; he also composes Latin poems on any great event in the royal family, or on any other extraordinary occasion. The professor of eloquence is the head of the *philological seminary*, founded in 1737 by J. W. Gesner, improved by Heyne since 1763, and now since

1812 conducted by the present professor of eloquence. This useful institution acquired some celebrity, under Heyne's superintendence, from the many able teachers formed in it; and it is the model on which the philological seminaries of other German universities have been founded. Its plan has now been so far extended as to require two assistant professors (at present Dissen and Cha. Otf. Müller), to guide the studies of the young philologists, who consist of ten ordinary members (receiving a stipend from government), and as many extraordinary members as the director thinks proper to admit after a previous examination by all the three professors. All the members have the same duties to perform, viz., to interpret difficult Greek and Latin authors, and to write and defend Latin essays under the direction of one of the three professors. Without institutions of this kind a system of education must be very deficient: the ability of teaching depends as much upon a thorough training as proficiency in any other professional study. To become a teacher in any gymnasium or school of Hanover, it is necessary to pass an examination, at Göttingen, before a board of examiners consisting of four professors of philology, history, mathematics, and German literature; and all the schools of the kingdom are superintended by a board of royal commissioners at Hanover, which appoints all the teachers.

The department of history was first taught by Gatterer, Spittler, Pütter, Schloezer, &c., and now principally by Heeren, whose works have been translated into most of the continental languages, and introduced to the English public by the Oxford translation. They are also well known in North America through Mr. Bancroft, who has translated the *Reflections on the Politics, &c., of ancient Greece*, the *Manual of Ancient History*, and the *System of European States*.

Astronomy and the higher branches of mathematics, which have formerly had distinguished teachers at Göttingen, are now taught by Gauss, to whom we owe many important solutions, and who ranks among the first mathematicians of Europe.

An observatory was erected in 1751, and superintended by Segner, who was succeeded by Tob. Mayer (1755—1762), Lowitz, and Kaestner. The local advantages of this original establishment (which was a watch-tower in the southern town-wall) were indeed not very superior; but all the important discoveries of Tob. Mayer, whose memory the British parliament has honoured by granting to his heirs a considerable reward for his excellent tables of the moon, were

made in this watch-tower. The new observatory, conducted by Gauss and Harding (who died a few months ago), was commenced in 1802, and after many interruptions, caused by war and the frequent changes of the government, was finished in 1816. This truly magnificent edifice is erected at a short distance from the south-east corner of the town, on an open spot, commanding an horizon of fifteen miles. The main building is a rectangle, a hundred and twenty feet in length, forty in breadth, and thirty-two in height; its roof is flat and covered with copper, and in the centre there is a moveable cupola of copper, fourteen feet high. The two wings on the north and south-side are designed for the residences of the two professors. The astronomical apparatus consists of all those highly improved instruments, by means of which the study of astronomy has made so rapid and important advances in our age.

The study of natural history and of the natural sciences in general is greatly promoted by the well-arranged academic museum founded in 1773. It originally consisted of a private collection of Professor Büttner, which was bought by the university and intrusted to Blumenbach's care. In 1793 an edifice of large dimensions, adjoining the public library, was appropriated for its reception. Here it has continually been enriched by considerable donations of the royal family and patriotic scholars, but particularly by the indefatigable exertions and extensive literary correspondence of Blumenbach, who has, besides, a very valuable collection of his own, which he exhibits in the course of his lectures. The academical museum consists of fourteen rooms, seven of which are appropriated to the zoological department, five to mineralogy, and two to *ethnography*, or the study of the customs and modes of life of the various branches of the human race. The mineralogical and geological department, since 1815, has been under the particular superintendence of Hausmann, who has, besides, a large collection of his own. There is also a gallery of paintings connected with the museum. It consists principally of a private collection (of originals by some of the best Dutch and German masters) presented to the university in 1795, and at first kept in the private house of the professor of the fine arts, Fiorillo (who died in 1822); but since 1805 it has been arranged in four rooms of the museum. The museum contains also a curious collection of models.

Instruction in natural philosophy was first given by Hollmann, then by Kaester and Lichtenberg, and lastly by John Tob. Mayer, the younger, whom the present professor of natural philosophy succeeded in 1831. Weber, like his

predecessor, has an extensive philosophical apparatus at his disposal, which was originally collected by Lichtenberg, and sold to the university in 1789. There is also a magnetic establishment connected with the rooms of the philosophical apparatus in the museum, which communicates, by means of a double wire extended through the air from north-west to south-east across the steeples of the town, with a magnetic edifice built near the observatory. The experiments which Gauss and Weber are now making may lead to very important results.

ROYAL SOCIETY OF SCIENCES.

This society, to the exertions of which Göttingen is greatly indebted for its fame abroad, was established by George II. in 1751, according to Haller's plan. The principal object of this society, as well as of all similar institutions, is to improve and extend the field of knowledge by independent research and discovery. The Transactions are published in Latin, and may be considered as a repository of all the original views in science and literature, started in Göttingen by the professors of the medical and philosophical faculties, for divinity and law are excluded. The members of this society are appointed by the curators at Hanover, and divided into three classes,—that of mathematics, of the natural sciences, and of history and antiquities. The ordinary members are all resident at Göttingen, and hold their meetings every month, when they read their essays. The honorary or foreign members are appointed by the ordinary members, and confirmed by the curators. The ordinary members likewise choose the correspondents. One prize-question is proposed every year, for which persons of any country may become candidates. The reward for the best essay is 50 ducats, or 24*l*. Besides, there are two other questions annually proposed on subjects of agriculture or political economy. The president of the royal society is the duke of Cambridge, viceroy of Hanover, first in 1802, and again since 1813: Blumenbach has been perpetual secretary since 1814. The immediate superintendence is annually committed to one of the older members of the society. •

GÖTTINGEN LITERARY REVIEW.

This journal commenced in 1739, and was first entitled *Göttingische Zeitungen*. It continued under the superintendence of several editors, till Haller, in 1747, took the management of it upon himself: in 1753 it was intrusted to the care of the Royal Society, under which it continues to

the present day. Its original title was then changed into *Göttingische Anzeigen von gelehrten Sachen*. After Haller's departure in 1753, Michaelis edited this journal till 1770, when Heyne entered upon the duties of this office with uncommon zeal and great success. The title was changed, for the third time, in 1802, when the review began to be called *Göttingische gelehrte Anzeigen*. After Heyne's death in 1812 it was superintended by Eichhorn, and since 1826 by Heeren.

Of all the periodicals now published in Germany, the Literary Review of Göttingen is the oldest and the only one which has outlived all the important political changes of the country. A tone of moderation, and strict adherence to truth, have at all times distinguished this paper from the ever-multiplying literature of the day, and must be considered as the principal causes of its long duration and undiminished success for nearly a whole century. More than fifty other periodicals, in the course of this long period, have been published in Göttingen for the various branches of science and literature as well as for general purposes; but they have all been discontinued after a longer or shorter existence. The reviews and short notices contained in the *Gelehrte Anzeigen* embrace all the branches of human knowledge. The most important scientific works of foreign countries, which are but seldom noticed in other journals, form the principal objects of its attention. The works reviewed in it are generally purchased by the Royal Library, or transmitted to the Royal Society. It contains also the annals of the Royal Society as well as of the whole University, and constitutes, consequently, the only medium by which the transactions and important events of the whole academic establishment are communicated to the public at large. Two sheets and a half in octavo, or forty pages of this journal, are printed and circulated every week. The whole forms two large volumes of about two thousand and eighty pages every year.

ON PARSING.

THE exercise, on which we propose to make a few remarks, is so familiar to all teachers, that it may seem unnecessary to offer any more precise rules for practice, or any hints for improvement. But we are inclined to believe that the methods generally adopted are not quite so perfect as they might be. There is no occasion here to describe them particularly; our

object is not to find fault, but, if possible, to correct what is faulty. The same plan, in the main, will often, and indeed generally, be good or bad according to the use which is made of it: it appears to us, however, that the most rational plans in common use are not unsusceptible of improvement. The great objection to the usual modes of parsing a sentence is their cumbersome and unscientific machinery, by which much time is wasted, and clearness of conception rarely gained. The remarks which we are about to make are as applicable to Greek as to Latin sentences; but, for the sake of brevity, we take a chapter of Cæsar for illustration,—De Bell. Gall. v. 32.

‘At hostes, posteaquam ex nocturno fremitu vigiliisque de profectioe eorum senserunt, collocatis insidiis bipartito in silvis opportuno atque occulto loco, a millibus passuum circiter duobus, Romanorum adventum expectabant.: et, quum se major pars agminis in magnam convallem demisisset, ex utraque parte ejus vallis subito se ostenderunt, novissimosque premere et primos prohibere adscensu atque iniquissimo nostris loco prælium committere cœperunt.’

The plan of beginning with the first word, and analysing every word as it comes one after the other, is, we believe, the most common; it does not, however, answer the end so well as might be wished. We shall attempt to analyse the chapter above-cited on another method, in the form of question and answer. Allowance must be made for the variety of answers, which might be given by the pupils, but the writer of this article has found, that after a very short practice, they seldom err. Nor is there any danger of its merging into a mere mechanical process, if the plan is pursued with energy.

‘Hostes expectabant et ostenderunt que cœperunt. What is the subject of the chapter? Hostes.—What did they do? Expectabant.—What did they await? Adventum.—The arrival of whom? Romanorum.—At what distance? A millibus passuum circiter duobus.—What precautions did they take previously? Collocatis insidiis.—In one or more bodies? Bipartito.—Where? In silvis—opportuno atque occulto loco.—Why, upon what grounds did they proceed thus? De profectioe Romanorum senserunt.—How had they knowledge of the departure of the Romans? Ex nocturno fremitu vigiliisque.—What did they do next? Se ostenderunt.—All in one part? Ex utraque parte vallis.—What was their inducement to make their appearance? Quum se major pars agminis in magnam convallem demisisset.—Did they give the Romans much time to look about them?—Subito se ostenderunt.—Cœperunt. They began to do what? Novissimos premere.—What more? Primos prohi-

bere.—To keep them from what? *Ascensu*.—Any thing else? *Prælium committere*.—In what sort of situation? *Iniquissimo loco*.—Disadvantageous for whom? *Nostris*.

The teacher may then proceed to show the respective dependence of every word; and in doing this we have generally found that the shortest and clearest way is to begin at the end.

Taking, for instance, the verbs as pegs to hang the rest on, we may show that ‘*committere*’ is tacked on to ‘*prohibere*’ by ‘*atque*,’ and ‘*prohibere*’ to ‘*premere* by *et*,’ and that they are all subordinate to ‘*cœperunt*,’ which is tacked on to ‘*ostenderunt*’ by the ‘*que*’ after ‘*novissimos*,’ and ‘*ostenderunt*’ to ‘*expectabant* by *et*,’ while ‘*hostes*’ is the subject of the three ‘*expectabant*,’ ‘*ostenderunt*,’ ‘*cœperunt*.’ We may then take the clauses singly, and show the object of *committere*, *prælium*, and the kind of place where they engaged ‘*iniquissimo loco*.’ Similar passages will then be shown in which the ablative is so used; and the dative *nostris*, ‘those to whom the ground was unfavourable,’ will be explained by similar examples—and so on through the chapter. By this kind of analysis we have found the interest of boys easily sustained, and clear ideas readily acquired. The advantage of the plan may be shown, we conceive, as well in verse as prose (though few, it is to be hoped, would prefer the former for teaching the ground-work of the language from): take, for example, the following lines in Ovid:—

‘ Nondum cæruleas pinus contemserat undas,
Effusum ventis præbueratque sinum;
Nec vagus, ignotis repetens compendia terris
Presserat externa navita merce ratem.’

Let *presserat* be connected with *præbuerat* by the *c* in *nec*, and *præbuerat* by *que* with *contemserat*: let the dependence of the other words then be shown from the end to the beginning, in something like the following manner:—What is the subject of *presserat*? *Navita*.—How is he characterized? *Vagus*.—What more? *Repetens compendia*.—Where? *Ignotis terris*.—What is the object of *presserat*? *Ratem*.—With what had he not laden his ship? *Externa merce*.—By what is this couplet connected with the preceding line? *C* in *nec*.—What case is *ventis*? *Dative*.—Depending on what word? *Effusum*.—*Effusum* agrees with what? *Sinum*.—*Sinum*, why accusative? Object of *præbuerat*.—To what other verb is *præbuerat* tacked on? *Contemserat*.—By what? *Que*.—Object to *contemserat*? *Undas*.—How are they charac-

terized? *Cæruleas*.—What had not yet despised the waves? *Pinus*.—What are the principal nouns in the four lines? *Pinus* and *Navita*.—The three principal verbs? *Contemserat*, *præbuerat*, and *presserat*.—What reason is assigned for the *navita* being *vagus*? *Ignotis repetens compendia terris*.

Again, in the following stanza of Horace, *Od. II. 10. 9*.

‘*Sæpius ventis agitur ingens
Pinus ; et celsæ graviore casu
Decidunt turres : feriuntque summos
Fulgura montes.*’

Let the three verbs be taken as the hinges of the whole ; and then let their subjects be shown in connexion with them. What is the subject of ‘*feriunt*?’ ‘*Fulgura*.’—The object? ‘*Montes*.’—The subject of ‘*decidunt*?’ ‘*Turres*.’—The subject of ‘*agitur*?’ ‘*Pinus*.’ What are the three most emphatical words? ‘*Ingens*,’ ‘*celsæ*,’ and ‘*summos*.’ What the next? ‘*Sæpius*’ and ‘*graviore*.’

We have seldom found this mode of analysing a passage fail of giving correct ideas, as far as it goes. But this is not all : even when the relative dependence of every word in the chapter has been shown, and every clause has been taken to pieces and dissected by itself, much remains to be done before the analysis can be said to be complete. Nor is it enough for the pupil to describe the words which compose the chapter individually by a long catalogue of names ; it is not enough for him to call *expectabant* indicative, imperfect, plural, 3rd person : he must, at the same time, verify his description, and give each sign its respective name ; and after divesting the root of every adscititious part, lay bare the primitive signification as far as he can. Then, and not till then, may the word be said to have been *parsed*, or resolved into its parts. He will know, if he has been properly taught, that the first *ā* is the representative of *ā* belonging to the crude-form of the verb (*expecta*), and *ē* part of the imperfect-sign (*eba*). Let him be asked for the singular 3rd (*expectabat*), and he will find that *n* (in *expectabant*) is the plural-sign ; and let the other tenses be compared with it in this respect. He may then be told that *n* in English sometimes, and in German constantly, signifies plurality, though not in verbs, as in *ox*, *ox-en* ; *sow*, *sow-en* (= *swine*) ; *cow*, *cow-en* (= *kine*), &c. Let him be asked for the singular 2d (*expectāeba-s* = *expectābas*), and he will find that *eba* is the imperfect-sign stript of its person-endings, as *era* is the pluperfect-sign in the indicative, and *isse* in the subjunctive mood—and that *m*, *s*, *t* are person-endings common to these as well as many other tenses. He

may be shown the different ways in which the persons are distinguished in different tenses of the active and passive verb; he will find that in the active *o*, *m*, and *i*, mean *I*, as *o* in *solv-o* and *solv-er-o*, *m* in *solv-eba-m* and *solv-era-m*, *i* in *solv-i*. Let him be asked for other verbs in *a*; these he will readily give, *ama*, *cura*, &c., and will see that *ă-ēba* is contracted into *āba*, as *ĕ-ēba* into *ēba* (*docĕ-ēba-m* = *doc-ēba-m*); and, if sufficiently advanced, he may be told that the old writers constantly contract the imperfect of the verbs in *i*, and write *audība-m*, although the full form *audī-ēba-m* afterwards became universally used. *Expect* will then be left: let him be told the meaning of the letter *t*, and let other verbs be compared, as *dic-t-are*, *trac-t-are*, &c., and then, after dismissing the preposition *ex*, he will find that the root is *spec*, which occurs in the verbs, *in-spic-ere*, *de-spic-ere*, &c. If he knows Greek, he may be told that the Greek *σπεω* (in *σπεπ-τ-ο-μυ*) and *σκοπ* (*σκοπ-ε-ω*) are the same word. The whole may now be succinctly exhibited in something like the following form:—

Preposit.	Root.	Freq. sign.	Crude-form.	Imperf. sign.	Plur. sign.	3d per. end.
ex	-spec	-t	-ă	-eba	-n	-t

'Excogitabant' may be dissected in the same way. Let the plural-sign *n* be dismissed, and we have the singular 3rd *excogitabat*; let the 3rd person-sign be exchanged for that of the second person, and we have *excogitaba-s*; let the imperfect-sign *eba* be dismissed (*excogitāebas* = *excogitabas*), and we have the crude-form *excogitā*: let the imperative sign *ĕ* (*solv-ĕ*) be added, and we have *excogitāĕ* (= *excogitā*). Let other verbs in *a* be compared, and let others in *it*, implying repetition, be shown, as *quær-it-are*, *fug-it-are*, &c., and after dismissing the two prepositions we shall have nothing left but 'g', the root, appearing under these forms *ăg* in *ag-ere*, *ĕg* in *eg-i*, *ĭg* in *ex-ig-ere*, *ac* in *ac-t-us*. The whole word may then be thrown into the same sort of framework as the other.

Prep.	Prep.	Root.	Freq. sign.	Crude form.	Imperf. sign.	Plur. sign.	3rd Per. sign.
ex	-co	-g	-it	-ă	-eba	-n	-t

If sufficiently advanced the pupil may be shown some curious phenomena of the root *ag*; how, for example, the *g* only remains in *co-g-it-are*, while in *ex-a-men* there is nothing left but *ā*, lengthened because of the omission of *g*; which latter instance may be compared with *su-men* (= *sug-men*, *sug-ere*, *succ-us*), *lu-men* (*luc-men*, *luc-ere*, *luc-s*, &c.) And proceeding a little farther he may be told how *ex-a-men* comes to signify both 'a swarm of bees' and 'the tongue of a ba-

lance,' and that 'examination' has the same root. 'That which is driven out' may be a good description of many things—of the tongue or needle of a balance driven out by the weight, or of a swarm of bees, as *ag-men* is a swarm of soldiers, an army on march. But these little points which are extraneous to the immediate lesson must of course be left to the discretion of the teacher.

One of the verbs in the lines of Ovid above-cited is 'præbuerat.' Let the final *t* be removed, and any other person-ending be affixed, when it will be seen that *præbuerat* is the crude form (the raw form, not dressed into any person) of the pluperfect indicative. By comparing the perfect the pupil will see that *era* is the *plu*-perfect sign, since he has already got the *u* in the perfect, *præb-u*: other examples of verbs, whose perfect is distinguished by *u*, will then be compared with it. After dismissing the preposition *præ*, all that is left will be the letter 'b'. The teacher will then compare *de-'b-u-era-t* with *præ-'b-u-era-t*, and show that they are both compounds of *habe* (*habēre*), contracted forms of *præhibe*' and *dehibe*' as *dē-ēm-o* = *dēmo*, *co-ēm-o* = *cōmo* (both being used, though in different senses) *pro-ēm-o* = *prōmo*, &c. The different letters of the word may then be packed up and labelled as before:—

Preposition.	Root.	Perf. sign.	Pluperf. sign.	3d per. sign.
præ	-b	-u	-era	-t

Indeed our own language furnishes us with a good model in this point. We do not give a pupil to understand, that somehow or other 'I was dining' is the imperfect of the verb 'dine;' that the different syllables in the words make up this tense among them: he would be shown, that 'he was dining,' is as good English as 'I was dining,' and, by comparing other phrases, he would see that this verb 'dine' was made imperfect by the *ing*. We contend that the same should be done in Latin and Greek: it is not enough to know, or rather to take on credit, the bare fact, that *dicebam* is the indicative, imperfect, first person, singular of *dico*; it would be just as reasonable to invert the order, and to say, that *dico* is the indicative present first person singular of *dicebam*. *Dic* means 'say,' *m* means 'I,' and *eba* means 'was or were—ing.' Thus then we may compare them closely:—

dic	-eba	-m	I- was -say - ing
say	was-ing	I	m-eba* dic *

Nouns and adjectives may all be treated in a similar manner. Take *profectione*. Let other cases, &c., of the word be compared, and it will be found that the crude-form is *profectiōn*,

and *e* the case-sign: let other nouns in *ion* be compared, *leg-iōn*, *reg-iōn*, &c., (appearing in the nominative without the crude *n*, *leg-io*, *reg-io*), and then other nouns in *ion* formed on participles, as *dict-iōn*, *act-iōn*, formed on the participles *dic-t'*, and *ac-t'*: it will then be seen that *fec* is the root of profectione, or rather *f-c*, appearing under these forms, *fac* in *fac-ere*, *fec* in *fec-i*, and *con-fec-t-us*, *fic* in *con-fic-ere*, &c.

Prepos.	Root.	Particlp. sign.	Crude-form.	Case-sign.
pro	-fec	-t	-ion	-e

It should then be explained how the sense of *departure* arises from *making*; and it should be compared with English phrases of similar import. And here perhaps we shall be pardoned, if we offer a suggestion on the kind of English, by which it is desirable to render Latin words in the instruction of boys. It is not uncommon, we believe, to encourage the plan of translating by words as near as possible to the Latin; indeed, some seem to consider it a merit to repeat the same word with an English ending. We are aware that it is not possible to translate every word in true Saxon-English, but, wherever it is possible, it should always be done, and wherever it is not possible, the Latin-English word should be explained as much as the Latin itself. For example, *profectio* is translated *departure*; but '*departure*' needs to be analysed as much as *profectio*; it is only putting the difficulty one step farther off, to substitute one hard word for another; and the difficulty is not at all the less, because the pupil is unconscious of it, but rather the greater. We speak of '*making for the harbour*,' '*making for the city*,' &c.; *proficere*, then, is '*to make for some other place*,' '*to make progress*,' '*to get on*;' and *pro-fic-isc-o* (which is used by Plautus, though the deponent form afterwards supplanted it) is '*to begin to make progress or make for some other place*.' Again we speak of certain occurrences '*making for a man's interest*,' '*conducting or contributing to his advancement*;' so Cicero, '*nulla res tantum ad dicendum proficit, quantum scriptio*'—"*nothing makes for speaking so much as writing*." We do not say that this kind of translating will always be the most elegant that could be adopted, but it will generally give clearness of thought—the teacher can give a smoother phrase afterwards. When the meaning of the word has been thus explained, there will be no difficulty in seeing how *profectio* comes to mean '*departure*.' *Confectus vulneribus* is a common phrase in Cæsar; but '*exhausted with wounds*' can hardly be called a translation of it—'*done up with wounds*,' if not a more elegant, is at least a more simple

phrase. 'Exhausted' is a word of complex meaning, and it needs to be explained as much as *confectus*, perhaps more. *Privatas injurias* is not well translated by 'private injuries;' the word 'wrongs' would be more like English. Again, *inducti* is translated 'induced;' we think that 'led on' would convey to any English boy a much clearer idea, and would better deserve the name of translation; *adducti* might almost as well be rendered 'adduced,' as *inducti* 'induced.' If 'Nameius et Verudoctius principem locum obtinebant' were rendered 'Nam. and Verud. obtained the principal place,' the sentence would still remain to be translated: in this case, indeed, the meaning also is affected by the use of the word obtained; *obtinebant* does not mean 'obtained,' but 'held,' or 'had.' These words, *inducti* and *obtinebant* are metaphors—they are applied not to tangible or sensible but to abstract objects. To us the words 'induced,' and 'obtained,' convey no simple idea, as *inducti* and *obtinebant* would to a Roman. If we say that 'a man was induced to any particular step by a train of circumstances,' we have no simple, unmingled idea presented to us: but if we say that 'he was led on by a train of circumstances,' or 'drawn on by a train of circumstances,' a picture is given to the mind, without complexity or confusion. Cæsar has the phrase 'omnium rerum inopia inducti,' (i. 27.) and Livy has the phrase 'rerum serie tractus ad id bellum,' (xxi. 5.) It is of the greatest importance in translating, not merely to preserve, but to transfer the metaphor in the original; and to be careful not to substitute one metaphor for another, when it can be helped. For example, 'si taciturnitas obstaret meritis invida Romuli,' (Hor. Od. iv. 8. 24.) should be translated 'if envious silence had stood in the way of,' &c.; if we were to say, 'had opposed,' or 'had obstructed,' besides not conveying a simple idea, we should introduce another metaphor. Again, 'Ciceronem suis consiliis multum officere,' (Sall. Catil. c. 27.) may be translated with the same observance of metaphor, 'that Cicero made greatly against his schemes.' We must preserve the lights and shades of the author, we must not alter or disguise his thoughts; in seeking to embellish, we shall be likely to disfigure, sure to misrepresent. In the translation of poetry, above all, it is essential to keep not only the words, but the tone of the author. Probably a few instances of Greek phrases will throw some light on the matter. Why should not εὖ πρήσσοντα (Herod. i. 24.) be really translated 'doing well?' Why should we be told that μέλαινα δεινῶς (Herod. ii. 76.) means very black? It is 'frightfully' or 'terribly black;' we have the same transition of thought in our own language.

Why should *πρῆγμα οὐδὲν ἐποίησατο* (Herod. vi. 63.) be rendered 'he thought little of,' &c.? it is 'he made nothing of. Generally, in fact, we may find the same or some similar phrase in English. Of *Κλεπτόμενος* (Herod. vii. 49.), 'stealing on' is the literal meaning, and the transition of thought is the same in English and Greek. If we had not already digressed too much, pertinent illustrations might be drawn from the German language. *Ἐννόια αὐτῷ ἐμπίπτει* (Xen. Anab. iii. 1, 13.) is an idiomatic Greek phrase; it is also genuine German, the word *ἐμπίπτει* being really translated, and not merely disguised in a German dress—*Es fiel mir ein*, 'it occurred to me,' corresponds exactly to *Ἐννόια ἐνέπιπτε μοι*. But it would require many pages to go fully into this subject.

When sentences are thus really Englished on the plan which we have recommended, every word conveys an idea, clear and distinct, not obscured by a cloud of derivative and conventional associations. But the mode of translation commonly prevalent is, in our opinion, little better than the version of that passage, 'much learning hath made thee mad;'—'thy profound erudition hath disordered thine intellect.' Surely the learned author of this translation was not aware that almost every word in the sentence required many sentences to explain it. So far, however, from objecting to the practice of showing what English words are derived from the Latin, we think it ought never to be neglected. If Cæsar, for example, be the book read, it is a good plan to take the words as they come in the chapter, and ask the pupils successively for one or more English words, containing the same root, at the same time explaining the meaning of the modifying syllables which may be attached to it. For instance, if the verb *aug-ere* should occur, after analysing the word and finding that the root is *aug*, they may be asked for the participle (*auc-t'*) and then required to form a noun in *ion* upon it, (*auc-t-iōn*, nom. *auc-t-io*;) they may then be shown how the English 'auction' acquires its ordinary sense. We give this simply as an illustration of our meaning: most words may be treated in the same way. By the various means of analysis, which we have described, indolence of mind is greatly counteracted; the curiosity of the pupil is kept alive, and he is ever on the alert to find some new phenomenon; he becomes a discoverer, and therefore becomes confident: he has a power given him, which will enable him to make farther acquisitions, and courage, which will urge him to put forth that power on any subject that presents itself. A habit of accuracy and minute criticism is produced, which will conduct to useful ends. In language he looks for resemblances and analogies;

he seeks for relationships and connexions, families and races ; he strives, because he cannot help striving, to sort, to arrange, and to classify : every fact he meets with he endeavours to reduce to some previously ascertained principle, or examines and compares with other facts in order to discover the law which pervades them. If he should find results for which he is unable to account, he will not straightway consider them as irregular or anomalous ; he will hunt only the more eagerly for others to illustrate them. He will never yield to the belief, that any thing in language is arbitrary or accidental, causeless or capricious. He will be no believer in chance. He will look for principle and system in all the changes which he observes, and will not be satisfied with a disorderly learning or knowledge in the lump. He will not be content with being told that in the perfect of *jungo* 'go fit xi,' and that in the perfect of *scindo*, 'do fit di.' He will want to know why *go* should become *xi*, and he will not be much the wiser, if told that '*go gaudet in xi* : ' he will want to know the reason of this attachment ; that is to say, he will require similar examples of the transformation, and will seek to ascertain the principle of it. It may possibly be said that no boy will be foolish enough to think that *g* in *jungo* is connected *with* the *o* instead of the *ju*, or that *x* in *juxi* is connected with the person-ending *i*. The majority, we conceive, would never think about it, but those who did think, would very naturally be led into the error we have adverted to, No one accustomed to the practical part of education can be blind to the value of the strictest veracity and accuracy in teaching, preserving not only the fact, but the colour of the fact, unchanged. There is never an error, we believe, however small and trifling, without its appropriate train of misconceptions and confusion. Error in theory will inevitably work injurious effects in practice, not the less certain because concealed. Minute faithfulness in the representation of facts is essential to the spirit of a sound philology. For example, why should a boy be told that the perfect of *fero* is *tuli* ? What conclusion is to be drawn from this ? Is he to believe that it is or is not the perfect, or is he to see by his own common sense that *tuli* cannot be the perfect of *fero*, but must be the perfect of some other verb which has been robbed of it ?* If so, why was he told what he himself, yet

* Bopp (Vergleichende Grammatik, p. 98.) suggests that the perfects *scīdi* and *fīdi* are the remains of reduplicated perfects, *sci-cid-i* (in *spo-pond-i* and *ste-t-i* the *s* is omitted for euphony, = *spo-spond-i*, *ste-st-i* ; *sci-cid-i* is the full form, used by Ennius, "Quum saxum sciciderit" in Priscian, Lib. x.) and *fi-fid-i*. *Tūli* may be added to them, as the perfect of *toll-o* and the remains of *te-tu-li*, which is used by Plautus, *Amph.* ii. 2, 93, and by Terence and Lucretius, and is also found in the compound *re-t (e)-tul-i* = *rettuli*.

raw in the study, is to see to be false? Why are we told by Zumpt * that 'suffero has no perfect, *because* sustuli belongs to tollo?' Is a boy to see that this also is absurd? or is he to learn and believe it? It is true that, if he had been well taught, he would say, 'the argument of Zumpt is altogether foreign from the subject; sustuli may belong to tollo, but this is no reason why suffero should have no perfect: although amo has amavi, it does not follow that rego has not rexi. But is it not far more likely, if a boy had been taught all along on this blind and unreasoning method, that the healthy tone of his mind, not having been cultivated, would have become dulled and blunted to the perception of inconsistency? Incongruities in language would have become familiar to his mind, and he would never look into the phenomena of words with the expectation of finding any regularity or system, or of detecting any common principle. Nor is it sufficient to explain such statements afterwards; to give them at first for the sake of brevity, with the intention of *correcting* the impression at a future time: misconception must arise; unless clear ideas be given, confused ones will grow up. The mind does not mechanically sift the philosophical from the absurd, the correct from the incorrect, the true from the false. When a pupil is told that in the perfect tense of different verbs, *no fit vi*, and *so fit vi*, and *sco fit vi*, and *vo fit vi*, and *veo fit vi*; he is probably amazed at *vi*'s pliant and elastic nature, appearing, as it does, to fit all cases equally well; but he can have no notion of any order, or principle, or classification, and it is not without reason that the tyro imagines the Latin grammar to be an elaborate device for puzzling and plaguing boys. We contend that it is of the utmost importance that, as far as the pupil goes, he should have clear ideas; we do not say that all boys, without regard to natural power or previous instruction, can be screwed up to one uniform standard of attainment, but that the plan should be such as to give a clear idea of whatever is learnt. We need hardly remark on the absurdity of setting boys to learn by heart what they do not understand, to commit to memory words of whose meaning they are ignorant. This and all other kinds of rote-learning must be bad. For example, it has been maintained that the only way of teaching the Latin verbs is by a sort of mechanical process, getting the boys into a way of saying them over one after another, judging by the sound more than the sense, thus: dico, dixi, dicere, dictus; duco, duxi, ducere, ductus. The absurdity of such a method is obvious. A boy might be acquainted

* See Kenrick's translation, p. 159, second edition.

with every verb in the language in this fashion, and yet not be able to analyse a single verb correctly.

Whatever plans are good, those which dispense with the exercise of thought must be bad. What is got without labour, is lost without regret. Mechanical learning must be injurious; and yet mechanical learning is often attended with labour. But this is not the kind of labour that we would advocate, which oppresses, not exercises the mind; to be salutary, the labour must be of a reasonable kind; it must not consist in the committing to memory of irregular rules and arbitrary exceptions; it must not consist in learning the 'go fit xi's,' or the 'furo fit insanivi's' of Lily's or the Eton grammar; it must not demand the accurate recollection of doggrel lines, as little connected as the articles in an auctioneer's catalogue. The natural effect of such instruction (if it deserve the name at all) is to dishearten the pupil; he is dismayed at the plailess patchwork which lies before him, and is disgusted at the disorder which pervades the language. He conceives that the fault is in the workmen, and not in the materials. When the ancient languages are taught in this manner, the time spent in their acquirement must be considered as wasted. No one, possessing the slightest knowledge of the matter, will deny that the benefit derived from the acquisition of them, greatly and even mainly depends on the manner in which they are acquired; and it must consequently be allowed, that the years spent in learning on the plans we have objected to, are worse than thrown away. The mind receives a distaste for knowledge generally, which will not easily be got rid of. Labour which is beneficial, on the contrary, will encourage and not dishearten, strengthen and not impair the faculties; it will be directed to discovery, arrangement, and classification, and will only be satisfied with the attainment of general principles.

EDUCATION IN KENT.

BENENDEN.

EDWARD GYBBON, Esq., of Benenden, gave lands, estimated at eighty acres, for the foundation of a grammar-school, and the maintenance of a master in this parish, in 1677. John Gybbon, Esq., in 1707, gave by will an Exchequer annuity of 14*l.*, out of the excise of beer, &c., which expired in 1791, for augmentation of the salary of the master, provided he were neither vicar, curate, nor reader here; if he should be so, the bequest was to be applied to other purposes. Edmund

Gybbon, Esq., gave a house and land, called Sarnden, in this parish, estimated at seventy-three acres, for the maintenance of an usher to the school. The feoffees, by the sale of timber, purchased a house and sixteen acres more. Reading and writing only are now taught in this school.

BIDDENDEN.

William, or John Mayne, Esq., of this parish, by a deed of feoffment in 1522, founded in it a free grammar-school, and endowed it with a school-house, garden, and certain payments out of lands in Biddenden, Tenterden, and Betherdsden, of the present yearly amount of 25*l.* or thereabouts. The management of the school, and the appointment of the master, were vested in trustees, the visitorship being in the Archbishop of Canterbury. The master was directed to be a Master of Arts of one of the universities: but, from the inadequacy of the funds, and the condition of the population, that direction is now necessarily dispensed with, and instruction in reading and writing only is given.

CRANBROOK.

Simon Lynch, of this parish, founded by deed, in 1574, a grammar-school to be open to the sons of all the inhabitants; assigning for its maintenance and support a house and land in Cranbrook, and a farm in Horsemonden. Queen Elizabeth at the same time granted a charter of incorporation, by which the management of it was placed in thirteen trustees, resident-freeholders in the parish, the vicar being always one. The produce of the endowment is at present such as to allow the master an annual salary of 100*l.* He has, besides, an excellent house, capable of accommodating a considerable number of boarders. The extra charge for boys on the foundation is 15*s.* per quarter, classical books being provided by the trustees. The charge for boarders for instruction in the usual branches of education is fifty guineas per annum. There is at this time but one boy on the foundation; a circumstance somewhat surprising, considering the populousness of the town, the character of the master, and his known anxiety to fulfil the terms of the endowment.

The Rev. D. W. Davies, M.A., is the master.

DEPTFORD.

Dr. Robert Bretton, in 1670, gave by will 200*l.*, part of a larger sum secured on a mortgage of the lands of Richard Maddox, the interest to be paid in the public school for teaching twelve poor children grammar and writing, (to be laid out in the purchase of lands, the rents to be paid for a

salary to the masters); and if any of his four children died under age, he gave 200*l.* more out of the said larger sum for teaching twelve other poor children, the same to be laid out in the purchase of lands or houses; and if a second of his four children died in like manner, he appointed 100*l.* more of the said portion to be paid to the churchwardens, to be laid out in the purchase of rents for the schoolmaster, for teaching six other poor children. Only 400*l.* were received on account of these bequests; and that sum was vested in South Sea Annuities for the purposes of the will. We are unable to state any further particulars about this charity.

GOUDHURST.

John Horsemonden, of this parish, by will, in 1670, charged his real estate in Tenterden with the payment for ever of 35*l.* per annum for the endowment of a school, for the teaching of grammar, and of the Latin language. He likewise gave a house for the residence of the master, which however is insufficient for that purpose; the rent of it, which is about 10*l.*, is received by him together with the above named salary. He is bound to instruct any children of this parish, provided the number do not exceed twenty; each boy now pays 3*l.* per annum for such other instruction as the founder's will does not require. The specified number is not often complete. Twelve inhabitants of Goudhurst, of whom the vicar is one, are the trustees, and the management of the school is entirely vested in them.

. Geoffrey Bateman, B. A., of Trinity College, Cambridge, is the master.

HAWKHURST.

Sir Thomas Dunk, by will, in 1718, gave the sum of 2000*l.* to be expended in the erection and endowment of a free grammar-school and six almshouses at Highgate, in Hawkhurst; the alms-houses being appointed for the reception of six decayed housekeepers, three men, and three women; the master of the school to have a stipend of 16*l.* per annum, and the almspeople 6*l.* each. The school and almshouses were accordingly erected, and endowed by William Richards, Esq., his executor (the surplus, after the completion of the buildings, being applied to the purchase of lands), who, for the better perfecting of the buildings and endowments, added to the original sum 600*l.* of his own money; and further by his will, ordered that a sum, not exceeding 250*l.*, should be laid out in the purchase of lands, the income of which should be employed to augment the stipend and pensions of the master and almspeople. In

pursuance of this bequest, George Dunk, Earl of Halifax, who married Anne, daughter and heiress of the said William Richards, in 1753, in consideration of the said 250*l.*, and of 70*l.* raised from the sale of timber growing on the estate previously settled upon this charity, conveyed to the trustees of it, and their successors for ever, being the minister of Hawkhurst, and ten others, a messuage and land in this parish and in Sandhurst, of the then yearly value of 17*l.*, by which means the stipend of the schoolmaster was increased to 20*l.* per annum, and the pensions of the almspeople to 7*l.* The present revenue is about 130*l.*; and the terms of the foundation are complied with. The number of boys, however, who require classical instruction in this parish is small.

LEYBORNE.

The Reverend Edward Helme, vicar of the adjoining parish of Birling, conveyed to trustees, in 1775, a piece of land in this parish, with the dwelling-house, school-room, and other buildings, erected upon it; and transferred 1000*l.* four per cent. Consols, Bank Annuities, to them for the endowment of a school for ten boys and as many girls, of the parishes of Leyborne and Ryarsh, and five from the parishes of West and East Malling, to be recommended by the churchwardens of the respective parishes, and approved by the trustees; the children to be instructed by the master of the school in reading, writing, and accounts (the boys also in Latin) and other useful learning and religious duties, according to the principles of the Church of England, until they should attain the age of fourteen years. Mr. John Price was by the deed appointed to the mastership, with an allowance of 30*l.* per annum at the least; but, if the revenue would admit, it was to be increased to a larger sum; and, in case the scholars should be reduced to the number of fifteen, the master was to be dismissed, unless it should appear to the satisfaction of the trustees that such deficiency was not occasioned by his neglect or misbehaviour.

As often as one or more of the trustees should die, the survivors, at their next general meeting, were to appoint in his or their room. The trustees were directed to meet in Birling church on the 1st day of July in every year, to examine into the state of the school, and to make such rules and orders for the government of it as they should think proper.

LEWISHAM.

The Rev. Abraham Colfe, vicar of Lewisham, who died in 1657, by his will, dated 7th September, 1656, devised

certain estates to the Leathersellers' Company, in trust for various charitable uses, and, among others, for the foundation of a grammar-school within this parish, with exhibitions for the maintenance of some of the scholars at the universities; the oversight and government being vested in the said Company. This bequest was confirmed by Act of Parliament in the sixteenth year of King Charles II. By direction of the will, a salary of thirty pounds was to be paid yearly "to a learned scholar and exact grammarian, who is sound in the true religion, for teaching freely thirty-one youths, or male-children of the laity (besides the children of the ministers incumbent,) chosen out of all the parishes of the Hundred of Blackheath." These thirty-one free scholars are to be taken from different parishes, in a proportion ordered by the will; "and if any of the proper pastors and ministers incumbent of the several parishes of the Hundred of Blackheath, and also of Chiselhurst, have any sons, every one of them shall have power to send one son, yet but one only at once out of one house, to the grammar-school, to be taught freely." The master, previously to election, is to undergo an examination before the trustees, by the head masters of Westminster and Merchant Tailors' School, the deputies of the president and assistants of Sion College, and the clergy of the Hundred of Blackheath, and must be found to be "a very able and sufficient scholar to teach the Latin and Greek tongues, both in prose and verse, and also able to teach the Hebrew; and so to make every way fitting scholars to be sent to the Universities of Oxford or Cambridge." The present number of foundation scholars in this school is eighteen. The master is the Rev. J. Prendergast, who takes boarders at 50 and 40 guineas per annum, according to age*. We are informed on good authority that, under the present master, no difference is made in the instruction or treatment between the foundation scholars and those who board with the master. There is a library attached to this school, which contains some valuable books. The master has also a house and garden, with nearly an acre of ground. By the terms of the foundation there is to be, besides the master, an usher with 20*l.* a-year.

EXHIBITIONS.

Seven exhibitions of ten pounds per annum each, for seven years were founded, under the same endowment, for seven scholars, who should be judged fit, after a strict examination

* See a small pamphlet entitled "Plan and Terms of the Grammar-school, Lewisham Hill." And also Parliamentary "Reports from Committees: Education of the Lower Orders, Five Reports," 1818.

in the Latin, Greek, and Hebrew languages, by one of the chief schoolmasters in London, and the ministers of Lewisham, Greenwich, Deptford, Lee, and Chiselhurst, to be sent to either of the Universities of Oxford, or Cambridge. These exhibitioners to be children of persons not reputed to be worth above five hundred pounds; and natives of Lewisham to be preferred. It is also provided, that if, at any time, a scholar fit for the university should not be found in this school, an exhibitioner should be chosen, next from amongst the children of persons belonging to the Company of Leathersellers; then from the King's School, at Canterbury; and, lastly, from Christ's Hospital, in London. From an alleged insufficiency of the funds arising from the estates bequeathed by Mr. Colfe, these exhibitions have not, for many years past, been appointed to. It has, however, it must be remarked, been matter of complaint that considering the increase in value of property in the neighbourhood of London, where the estates are situated, that any such insufficiency should be alleged. The founder evidently conceived that they were ample for all the purposes for which he devised them*.

MAIDSTONE.

The foundation and original endowment of this school are unknown. The first notice we have of it is in a return made by Archbishop Parker, in the fourth year of the reign of Queen Elizabeth, in obedience to her Majesty's command, of the several schools and hospitals in his diocese of Canterbury. He certifies, that there was a school erected at Maidstone, by the charge of the mayor and commonalty of the town, who had purchased of the late king, Edward the Sixth, certain lands for that purpose, the revenue then amounting to 9*l.* 6*s.* 8*d.* per annum. Hereupon a charter was granted by the queen, empowering the corporation to make wholesome orders and statutes for the government of the master and scholars; what these were does not now appear. William Lamb, formerly gentleman of the chapel to King Henry the Eighth, among other charities, gave 10*l.* per annum to this school. John Davy, M.D., of Maidstone, in 1649, gave, by his will, sixteen acres of land in the parish of Newchurch, in this county, then let at 18*l.* per annum, for the further maintenance of it. The whole income, now amount-

* According to the Report of 1818, the whole income of this charity from the estates, which are at Edmonton, Lewisham, and Barnet, was 343*l.* 8*s.* 6*d.* for the year 1817. This was laid out for the various objects of Colfe's charity, including the grammar school, almshouses, gifts to the poor. It appears on an average of nine years (1808—1817), that the expenditure, owing to repairs, &c., exceeded the income; and it was stated in evidence before the Committee (1815), that the estate was then indebted about £700 to the Company.

ing to 43*l.*, is paid to the master, who resides in the school-house. The present master is the Rev. T. Harrison, M.A.

Any children of freemen of Maidstone are received into the school for classical instruction, gratis; for other instruction they are charged four guineas each per annum. There are at present seven boys on the foundation. There are ten day boys not on the foundation, who pay for their instruction ten guineas per annum each; and sixteen boarders who pay forty guineas. The establishment of a proprietary school at Maidstone has been a serious injury to this school. It is, however, well conducted, and deserves more support than it receives. Provision is made for instruction in every branch of education, and competent assistants are maintained.

EXHIBITIONS.

Robert Gunsley, rector of Titsey, in Surrey, by his will, in 1618, gave the rectory and parsonage of Flamsted, in the county of Hertford, to the master and fellows of University College, Oxford, to the intent that they should make choice of four scholars, who should be chosen by the master and fellows, one half from the grammar-school of Rochester, and the other half from that of Maidstone, being such only as should be born in the county of Kent, and none other, except of his own kindred; and that, as often as the exhibitions should become vacant, they should be filled up by the said master and fellows, within three months; and that the charges of the master and such fellows as should be sent and employed in the election should be borne and deducted out of the allowance appointed to the scholar or scholars, who should be elected in the interim of the three months; all which scholars, as they or any of them should attain to their rooms or places, should be maintained by the master and fellows at some grammar-school, until they were fit to go to University College, and then be placed there by them, with fit and convenient chambers, and that they should allow to each of the four scholars, yearly, 15*l.*; those of his name and kindred to be preferred; and that the master and fellows should pay to the curate or curates of Flamsted the yearly sum of 60*l.* as his or their salary, the election of whom should be from time to time by the master and fellows; provided, nevertheless, that whenever the curate's place should be void, one of his own scholars should have the option of it before any other. In consequence of this benefaction, four scholars were allowed chambers and 15*l.* per annum each at University College. Several so chosen, nearly one-half, appear to have been of the name or kindred of Mr. Gunsley. Since the year 1796, no scholar has been elected from this school*.

* The college, we presume, now has the exhibitions.

ROCHESTER.

After the dissolution of the Priory of Rochester, King Henry VIII., by his Charter, under his privy seal, founded the cathedral establishment there, as it at present exists, and attached to it a grammar-school for the instruction of twenty boys. This school was once in considerable repute, especially under the late head Master, John Griffiths, D.D., when it maintained a high character, and sent forth many good scholars. Besides the twenty foundation boys, there were usually from seventy to ninety boarders. Dr. Griffiths was a man eminently qualified to uphold the school in public estimation, by his devoted attention to his duties, and his sound learning. The establishment of a proprietary school in the neighbourhood has undoubtedly had a material influence in reducing this school to its present low condition. The number of foundation boys, or king's scholars, is now only ten; and there are only two or three boarders. The former are gratuitously instructed in Latin and Greek; and pay five guineas per annum for writing, arithmetic, &c. They have each a stipend of 1*l.* from the dean and chapter. There is a school-house, in which the master resides; but it is very insufficient for the purpose. The salary of the head-master is 67*l.* per annum, paid by the dean and chapter, in whose nomination the office is, and who have the entire control of the school. The master is besides entitled to the choice of a living in turn with the minor canons, from the patronage of the church. The salary of the under-master, or usher, is 20*l.* per annum, paid by the same body; but the place, it need hardly be remarked, is a sinecure.

EXHIBITIONS.

By the statutes of the school, yearly exhibitions of 5*l.* were directed to be paid to four scholars, two at each university. These scholars were to be upwards of fifteen and under twenty years of age, to be chosen from this school in preference; and, if none were here, then from any other; the exhibition of 5*l.* to continue till they commenced Bachelor, which was to take place within the space of four years; after which they were to enjoy the same for three years; when commencing Master of Arts, they were to be allowed 6*l.* per annum; and after that 6*l.* 13*s.* 4*d.*: the college to be at the option of the dean, or vice-dean, and chapter, who nominate the scholars. These exhibitions are rarely claimed.

The Rev. Robert Gunsley, rector of Titsey in the county of Surrey, by his will in 1618 gave to the master and fellows of University College, Oxford, 60*l.* per annum, for the main-

tenance of four scholars, to be chosen by them from the free-school of Maidstone and from this grammar-school, such as are natives of the county of Kent only, of whom those of his name and kindred are to have the preference. The annual value of these is now 20*l*.

SUTTON VALENCE, OTHERWISE TOWN SUTTON.

William Lamb, who has been mentioned as a benefactor to the grammar-school of Maidstone, out of his great love of learning, and of the place where he was born, obtained, by letters-patent from Queen Elizabeth, in 1578, licence for the erection and endowment of a grammar-school in this parish, to be called "The Free Grammar-school of William Lamb," for the education of boys and youths in grammar for all time to come; and that after his decease, the master and wardens of the Clothworkers' Company, to which he belonged, should be and be called "the governors of the possessions, revenues, and goods of the grammar-school of Sutton Valence," by which name the Queen incorporated them, and gave them power to purchase and hold lands for the use of the school; authorizing them also to appoint the master, and to make statutes and ordinances in writing, touching the government of the master and scholars, and the management and disposition of the revenues and goods.

Mr. George Maplesden, in 1713, left by will 5*l*. per annum, for an English usher, to be appointed by the master. The income of the school, which is under the entire control of the Clothworkers' Company, amounts to about 100*l*. per annum. There is likewise a good house for the residence of the master. The mastership is now vacant. The number of boys on the foundation has generally averaged forty; these boys pay only for their books. They receive instruction in reading, writing and arithmetic, and Latin if they require it; but for a long time Latin has not been required. The school is open on these terms to all the neighbouring parishes. The late master had twenty boarders, for general education, at 30*l*. per annum.

EXHIBITIONS.

The Rev. Francis Robbins, B.D., senior fellow of St. John's College, Cambridge, by will, dated July 7, 1721, gave to the said college the sum of 200*l*. to found two exhibitions of 10*l*. per annum each, to be paid to two poor deserving lads of the name or kindred of Robbins, or Sabb, born in Kent, and, *for want of such*, to two poor and apt lads born in Chart, Sutton, Leeds, Langley, or Lenham, in Kent, and educated at Sutton Valence School.

SOUTHFLEET.

Sir John Sedley, Baronet, gave by will, in 1637, the sum of 500*l.* to found a free-school for the use of this parish, which money is vested in the rector and churchwardens ; and Mrs. Elizabeth Sedley, his daughter, gave, by will, in 1639, the sum of 400*l.*, charged on the Manor Farm, vested in the same, and of the annual produce of 20*l.* A small addition was likewise made by Sir Charles Sedley, son of Sir John.

SEVENOAKS.

Sir William Sevenocke, sometime Lord Mayor of London, by his last will, bearing date on the fourth and proved on the eleventh of July, 1432, gave certain lands, tenements, and a wharf adjoining, situate near the Tower of London, in the parish of All Saints, Barking, to the rector, vicar, churchwardens, and other parishioners, for the maintenance, among other purposes, of a grammar-school in this his native town ; that is, “ to find and maintain, for ever, one master, an honest man, sufficiently instructed in the science of grammar, bachelor of arts, in holy orders, lawfully constituted, which may keep a grammar-school in some convenient house within the said town of Sevenocke, with his goods, by the licence of the king, or by other lawful means, according to the discretion of his executors, that he may teach and instruct poor children whatsoever coming thither to be taught, taking nothing of them, or their parents, or their friends, for the teaching and instructing them.” For this service he assigned him ten marks sterling, payable quarterly. He appointed the two churchwardens, subject to the overlooking of the parson or vicar and of four honest men of the parish, as the receivers and disbursers of the rents, profits, &c.

“ About the latter end of the reign of King Edward the Third,” says Lambard the perambulator, “ there was found (lying in the streets at Sennocke) a poor child, whose parents were unknown, and he (for the same cause) named, after the place where he was taken up, William Sennocke. The orphan was, by the help of some charitable persons, brought up and nurtured in such wise, that being made an apprentice to a grocer in London, he rose by degrees (in course of time) to be maior and chief magistrate of that citie. At which time, calling to his minde the goodness of Almighty God, and the favour of the townsmen extended towards him, he determined to make an everlasting monument of his thankful minde for the same. And therefore, of his own charge, builded both an hospital for relief of the poor, and a school for the education of youth within this town, endowing the one and the other with competent yearly living (as the days then suffered) towards their sustentation and maintenance.” The income of the

school was afterwards augmented by the liberality of John Potkine, D.D., once a scholar of it, who by his will, dated April 8, 34 Henry VIII., gave to it for ever the sum of 9*l.* annually, arising out of property in Bread-street, in London. It appears that much trouble was experienced by vexatious litigation, which was brought to a close in the second year of Queen Elizabeth, principally by the intervention of Sir Ralph Bosville, on whose petition letters-patent were obtained establishing the school, under the name of Queen Elizabeth's Grammar-School, to have one master, and one under-master. The management was vested in a corporate body, to be called "the wardens, and four assistants, of the Free-School of Queen Elizabeth in Sevenoaks," Ralph Bosville, or his heir, being resident in the county of Kent, to be always one; the other assistants to be elected annually by the parishioners, in the church, on the 29th of September; and the assistants to elect the wardens. The wardens and assistants were authorized to make rules for the government of the school; to elect the master and under-master, and to present them to the Archbishop of Canterbury for approval. In the 39th year of this reign an Act of Parliament passed, reciting and confirming these letters-patent. In 1571 Anthony Pope, of the city of London, gave, by will, a house in Petty Wales to this school. John Porter, by deed, dated 25th October, 20 Eliz., gave a rent-charge of 12*l.*, upon certain lands, to the wardens and assistants, of which the sum of 10*l.* was to be paid to the masters, and the remaining 2*l.* to two poor persons of the neighbouring parish of Seale. In consideration hereof, it was engaged that poor children, born and inhabiting in the parishes of Seale and Kempsey, should be gratuitously taught. The conditions of this deed not being fulfilled on the part of Porter's heirs, a decree of Chancery was obtained, 9 James I., by which the rent-charge was restored to the school. In the eighth year of Geo. I., the leases of the warehouses, erected on part of the lands devised by Sir William Sennocke, having expired, and the school and almshouses being much out of repair, on a proposal made to the wardens and assistants for the purchase of them, an Act of Parliament passed to vest the property in trustees, for the use of the crown, the sum of 2500*l.* being paid by the crown for the rebuilding of the school and almshouse, and the surplus of it directed to be put to interest; together with a yearly rent of 550*l.* for their perpetual support. The money out at interest is about 1000*l.* In pursuance hereof, the present school-house was erected on the old foundation in 1727, previous to which time complaints were made that the assistants had continued in office without re-election; had appointed two

of their own tenants to be wardens, had neglected to rebuild the school, to appoint a master, or to give account of the funds; and an order was obtained from the Lord Chancellor to rectify these alleged abuses.

This school is open for instruction in Greek, Latin, and English reading, gratis, to the parish of Sevenoaks, and its neighbourhood; the sum of three guineas per annum is charged for writing and arithmetic. The present number of boys on the foundation is ten, which number it seldom exceeds. The master resides in the school-house, with a salary of 50*l.* per annum, and an allowance of 25*l.* for an usher. He receives boarders, which he is allowed to do without limitation, at sixty guineas each.

EXHIBITIONS.

Edward Sysley of Sevenoaks, by deed, October 17, 16 James I., gave an annuity of 52*s.* to a poor scholar of Sevenoaks school, for his maintenance for seven years at Sydney Sussex College, Cambridge, in fulfilment of the wish of John Spratt, whose heir and executor he was. This seems to have been lost.

Robert Holmeden, by will, July 20, 1619, founded an exhibition of 4*l.* per annum, now increased to 8*l.*, to be in the gift of the Leathersellers' Company, for one scholar from this school to Oxford or Cambridge, and, in default, from Tunbridge school.

Dame Margaret Boswell, daughter of Sir Ralph Bosville, and widow of Sir William Boswell, before her death, in 1675, settled a farm in Essex for endowment, *inter alia*, of two scholarships or exhibitions in Jesus College, Cambridge, of 12*l.* per annum; the scholars to be called Sir William Boswell's scholars, chosen from Sevenoaks school; and, in default, from Tunbridge school. These exhibitions are now of the annual value of 75*l.*, and are holden, one by a native day-scholar, and the other by a boarder.

By a decree of the Court of Chancery, January 21, 1735, four scholarships, or exhibitions, of 15*l.* were founded, out of the estates, to be held seven years, for the maintenance of scholars, educated here, at Oxford or Cambridge. The funds are now too low to permit any appointment to them.

The Wardens are—Messrs. Thomas and Henry Parker.

The Assistants—The Countess of Plymouth.

The Earl Amherst.

Mutton Lambard, Esq.

Colonel Austen.

Master—The Rev. Edward Heawood, Christ Church, Oxford, M.A.

TUNBRIDGE*.

The free grammar-school in this town is of the foundation of Sir Andrew Judde, a native of Tunbridge, citizen and skinner of London, and Lord Mayor in the fifth year of King Edward VI. He erected the school-house with some other buildings belonging to it, and, with a design to endow it, purchased lands in the name of himself and Henry Fisher, intrusting the management of them and the school to the Skinners' Company in London. He procured the king's letters-patent, 7th Edward VI., for the foundation, with licence, that the master, wardens, and commonalty of Skinners, should be governors of the possessions, lands, and goods of the school, to be called "The Free Grammar-School of Sir Andrew Judde, in the town of Tunbridge." Sir Andrew died in 1558, and by his will bequeathed the lands so purchased to the Company of Skinners, for the purposes of this school. They were assigned accordingly by Henry Fisher above mentioned; but, after his death, his son, Andrew Fisher, endeavoured to impeach those conveyances. The whole, however, being examined in Parliament, in the fourteenth year of Queen Elizabeth, an act passed for the assurance of the lands to this school; and again, afterwards, upon a hearing in the House of Commons on the petition of the company, with the consent of Fisher, the former act was confirmed, 31st Elizabeth, by another act, for the better assuring of the lands and tenements, left by the will of Sir Andrew Judde, for the maintenance of this school, and other charities. At that time the master had 20*l.* and the usher 8*l.* per annum; and there were six scholars maintained at Oxford and Cambridge at a yearly cost of 30*l.* By the charter of King Edward VI., the warden and fellows of All Souls' College, Oxford, were appointed visitors, in case any dispute should arise. The words of the charter are, indeed, "*Collegium Omnium Sanctorum*;" but, as there was no college so designated, and the founder of this school was of kin to Archbishop Chicheley, the founder of All Souls', Sir William Blackstone was of opinion that the word "*sanctorum*" was written by mistake for "*animarum*," and that the College of All Souls was intended for this part of the trust; though it is not upon record that these visitors have at any time been appealed to. The statutes of the school were drawn up and signed by Archbishop Parker, and Dr. Nowell, dean of St. Paul's. Among other regulations, it is ordained that the master of the school shall be a Master of Arts, if it

* See "*An account of Tunbridge School, &c. 1827.*"

may be, and that the usher shall be chosen by him ; that the master may marry if he likes, or take orders if he likes, but that he must have no care or worldly business which shall interfere with his school ; and that the master shall have authority to reject such as apply for gratuitous instruction, or day boys, unless they can write competently, and read English and Latin perfectly. Disputes having arisen concerning the extent of the freedom of the school, in 1693 an appeal was made from the town of Tunbridge to the Skinners' Company, who thereupon limited its freedom according to the words of the charter, *Juvenum in villâ et patriâ adjacenti*, to "the boys inhabiting the town and neighbourhood ;" and this, according to the opinion of Lord Chancellor Yorke, was a very fair and reasonable construction. Notwithstanding, another warm dispute on this subject arose in 1764, when, after consulting the most learned lawyers, Mr. Yorke, Sir William Blackstone, Sir Fletcher Norton, and others, it was resolved ; at a court holden by the Skinners at their hall in 1765, that the children of the town and parish of Tunbridge, who could write competently, and read Latin and English perfectly, should be instructed, on proper application to the master, without payment of any consideration, except the statutable entrance money. But Sir William Blackstone was of opinion that All Souls' College ought to have been consulted.

In 1820, a suit having been instituted in the Court of Chancery touching the school estates, and the application thereof—the annual value having increased to an amount not contemplated by the founder, and therefore not provided for—it was, among other matters, referred to one of the masters of the court, to approve of a scheme for the future establishment of the free grammar-school, having regard to the *then* annual value of the school estates. By the report of the said master, made in December, 1824, it was certified, that, having considered the several schemes which had been laid before him, together with the said letters-patent, and the said orders and statutes of the said Sir Andrew Judde, he had thought it expedient and proper that the privileges of the said free grammar-school should not only extend to boys and youths whose parents or guardians should *bonâ fide* reside within the town and parish of Tunbridge, but also to such boys and youths whose parents or guardians should reside in any other parish or place in the county of Kent, within the distance of ten miles by the ordinary roads and ways from the church of the said town of Tunbridge ; which boys and youths should be considered as

constituting the first class: and, that there might be a sufficient number of youths to receive the exhibitions therein-after mentioned, he had thought it proper and advisable that there should be another, or second class, comprehending all boys and youths of the United Kingdom of Great Britain, who, being qualified under the regulations thereafter mentioned, should be capable of receiving the said exhibitions. And the said master being of opinion that exhibitions for youths going from the said school to either of the Universities of Oxford or Cambridge might be most beneficially established, he had prepared such articles as appeared to him to be necessary for effectuating that purpose, and also such other new articles, as from *the then present circumstances* appeared to be necessary for the future government and establishment of the said free grammar-school, and that the several articles thereafter set forth in his said report formed, and he had approved of the same as, a proper scheme for the future establishment of the said free grammar-school from Christmas, 1824, having regard to the *then* annual rents of the said school estates. Thus was the purpose of the school extended with its extended means, more respect being had to utility than to the terms of the original foundation; and thus a precedent was established, which may be referred to in similar cases that may hereafter arise. Among the new regulations, the master of the school has a salary of 500*l.*, and is allowed to take sixty boarders; and the usher, who has a salary of 200*l.*, may take forty boarders. No boy is to be admitted till he is eight years old; and each boy, not comprised in the first class, is to pay annually to the master 7*l.* 10*s.*, and to the usher 3*l.*, for his instruction. The school is in a flourishing state, and may become one of the most useful, as it is one of the most noble endowments in the kingdom. The present annual income is about 2000*l.*, and, by decision of the Court of Chancery, the whole is applicable to the benefit of the school.

The master is the Rev. Thomas Knox, D.D.

The second master, or usher, the Rev. Thomas Brown, M.A.

EXHIBITIONS.

The Court of Chancery, by the above-mentioned decree, directed sixteen exhibitions of 100*l.* each per annum to be founded, as part of the establishment of the school, for the scholars thereof at either of the Universities of Oxford or Cambridge, under the following regulations:

That such youths as shall be of the first class of scholars, being duly qualified, shall be preferred to those of the second class.

That the exhibitions shall be holden for four years; from the commencement of the University term next after the presentation of the exhibitors, and for such portion of the four years only as they shall be *bonâ fide* resident at one of the Universities during the usual terms; and in case any of the exhibitions shall cease before the expiration of such period as aforesaid, then the said exhibitions, for the residue of the said period, shall be given by the governors of the school, for the time being, to any youths then or formerly members of the school, who shall have undergone the examinations, and proved themselves qualified for the exhibitions, although they failed to obtain them, and who shall then be resident members of one of the Universities, and under the degree of Bachelor of Arts; the youths of the first class being always preferred to those of the second.

In January, 1827, the Company of Skinners ordered that no scholar should be eligible to an exhibition, until he had been a member of the school for the space of five years.

Sir Thomas Smith, second son of Customer Smith, by Alice, daughter and heirress of Sir Andrew Judde, among other bequests, in 1624, for the general benefit of the school, directed the Company of Skinners, to whom he gave property in Old Change and Lime Street, to pay yearly towards the maintenance of six scholars at the Universities, to be from time to time elected from this school, the sum of 60*l.*; that is to say, to each of the said six scholars 10*l.*, such payments to be continued for the space of seven years, and vacancies to be filled up as they should occur, by the Company.

Henry Fisher, the executor of Sir Andrew Judde, in the fourth year of the reign of Queen Elizabeth, both for the support of the school and for that of a student at the University of Oxford, granted to the master and wardens of the Skinners' Company certain messuages and hereditaments in the parish of St. Peter's, Cornhill; the exhibitor to be a member of Brazennose College. The value of this exhibition is now 17*l.* 9*s.* 6*d.* per annum.

Robert Holmeden bequeathed by his last will 4*l.* per annum, at the disposal of the Leathersellers' Company, to be given to a scholar of this school on failure of a claimant from Sevenoaks at the time of the vacancy.

Sir Thomas White, who was Lord Mayor of London in 1554, and of the Merchant Tailors' Company, directed by his will, that in the choice of a Bible clerk of his College of St. John in Oxford, a preference should be given to the candidates educated at either of the schools which supply that College, of which Tunbridge is one.

This school is also entitled to two exhibitions of the present annual value of 75*l.* on Dame Margaret Boswell's foundation, in default of candidates from Sevenoaks.

The Rev. Isaac Worrall bequeathed an annuity of 16*l.* to St. John's College, Cambridge, on condition that the sum of 12*l.* should be divided between two scholars educated at Tunbridge School, being the best and most hopeful of those in the upper form. Of such so qualified, those were to be preferred, first, who were born in the county of Kent, and in the parishes of Great Peckham and Watlingbury, or whose parents dwelt there. After these, those that were born, or whose parents dwelt, in the parishes next adjacent to Great Peckham and Watlingbury. In failure, any born in any county whatsoever in England or Wales. Mr. Worrall's kindred were, notwithstanding, to have the exhibitions, although not educated at Tunbridge School, in preference to others, if admitted of St. John's College; their proof of kindred being established to the satisfaction of the master and senior fellows. Next to his kindred, those of his name were to be preferred. These exhibitions are tenable till the degree of Master of Arts.

An exhibition of 2*l.* 13*s.* 4*d.*, chargeable on a house and lands at Lamberhurst in this county, was bequeathed by one Mr. Lampard, in 1593, to a scholar from this school to either of the Universities, in the nomination of the master, and appointment of the vicar and churchwardens.

Mr. John Strong left by his will, in 1713, a sum of money for apprenticing to some marine business a scholar of Tunbridge School; but it does not appear that any claim has been made upon it.

FELLOWSHIP.

Sir Thomas White, before mentioned, the intimate friend of Sir Andrew Judde, and founder of St. John's College, Oxford, *propter eximium amorem in eum*, as his statutes say, gave one of his fellowships to Tunbridge School. The person elected must not have left the school before the vacancy, for the statute expressly appoints, that the electors *ex suis scholis mittendos curent*, and it directs that the nomination shall be made by the *prætores vel seniores* of the several corporate towns from which fellows are sent to St. John's College; but as Tunbridge is not a corporation, nor has any individuals who answer the before description, there have been at times great disputes to whom the nomination properly belongs. It has, however, hitherto been made by the master and a few of the principal inhabitants, convened by

public notice, and the college has invariably admitted its validity, although attempts have been frequently made to set it aside.

THE SEMINARY FOR SCHOOLMASTERS AT KÖNIGSBERG, IN PRUSSIA.

IN No. XII. of this Journal, we gave a general account of the principles and views which directed the Prussian government in establishing and arranging the seminaries for teachers of the lower classes. We shall now show their application by giving the particulars of one of these institutions, and for this purpose we have chosen the seminary established in the Orphanotrophy of Königsberg, in Eastern Prussia.

Our choice has fallen on this institution for several reasons. First, it is not one of the largest, nor one of the smallest; the number of seminarists amounting last year to forty-three. Secondly, it occupies a conspicuous position in the history of public education in Prussia, being the place in which a number of successive experiments have been made, of which the present system of education is the result. Lastly, its internal arrangement is more complete than that of many other institutions of this description, a school being annexed to it in which those who intend to enter the seminary receive preparatory instruction. We shall therefore prefix a short historical notice of its foundation and progress.

The Orphanotrophy at Königsberg was founded by Frederick III., Duke of Prussia, the same day on which he declared his dukedom to be a kingdom, and caused himself to be crowned king, under the name of Frederick the First. This event took place on the 18th of January, 1701. According to the statutes of the foundation, twenty-four orphans were to receive an education in this institution. This number was in course of time increased to upwards of fifty, and then again reduced to thirty. The boys admitted, were, according to the intention of the founder, not to receive exclusively a classical education; but as at that time the education of the middle and lower classes had been very little attended to, a middle course, something between mere spelling and a classical instruction, was hardly known. But the funds, which were provided by the founder and increased by his successors, were abundantly sufficient for the maintenance of two classical teachers. Accordingly it happened that the original intention of the founder was soon departed from, and the whole system of instruction was modelled on that of a gram-

mar-school. In this form it existed for more than a century, and attained a certain degree of repute, a considerable number of learned and useful men having received their education in it between 1701 and 1809.

In 1809, however, the institution underwent a total change. After the unsuccessful war with France, which was terminated by the peace of Tilsit, the Prussian government, intending to raise the energy of the nation by an internal impulse, began to direct their attention to the education of the lower classes. Pestalozzi had many years before begun his useful labours, and his fame was then at its height. The Prussian government thought that their object would be best attained by transplanting his method of instructing the lower classes into the kingdom, and diffusing it through all the elementary schools. With this view one normal school was thought necessary, and perhaps sufficient; and among all the then existing institutions, the Orphanotrophy at Königsberg was selected as the most suitable for the establishment of such a normal school.

As the normal school then established in the Orphanotrophy was the first active step which government took for the improvement of the instruction of the lower classes, it may perhaps be interesting to know some particulars respecting its arrangement. According to the plan of the government, an indefinite number of boys were to receive their education here after the method of Pestalozzi; and those of them who showed talent and inclination for teaching others were to be employed as teachers, so that in this respect the institution might be considered as a seminary of teachers for the lower classes. But at the same time, it was to serve as a means of perfecting the method of Pestalozzi, and of diffusing it through all the Prussian territories. For the latter purpose the rectors and vicars, who all through Prussia are charged with the direction and superintendence of the middling and elementary schools, were invited to attend the instruction given in the institution; and the head and director was to deliver lectures to them on the principles of the method of Pestalozzi, and on the subjects which were to be taught in the lower schools. Lastly, it was intended that the most able of the teachers who had been employed in this institution, and had made themselves thoroughly acquainted with its methods, should establish similar institutions in the other provinces of the kingdom.

Mr. Zeller was charged with the execution of this extensive plan, who, from his enthusiasm, zeal, activity, and knowledge of the method of Pestalozzi, seemed to be perfectly qualified for the great task of reform: and undoubtedly he would have performed the task, had he possessed a sufficient knowledge

of human nature. But his efforts, not being directed by this most essential knowledge, his zeal and activity were rather detrimental to the cause which he had undertaken. He changed every thing in the then existing forms of education: most of these changes were mere trifles; and some of them quite puerile. Some very important branches of instruction he abolished or entirely neglected, substituting for them others of little or no importance. Thus, in the course of the first year it became evident, that the expectations of government with respect to this institution were completely frustrated. The efforts of government for the improvement of the education of the lower classes would thus have proved entirely abortive, and perhaps this great object would have been abandoned in despair, but for one circumstance. The rectors and vicars, as well as the teachers of the upper schools, had been invited by government to attend the instruction of the normal school and the lectures of Mr. Zeller for a month, and accordingly 102 clergymen and 81 teachers had availed themselves of this offer. The minds of all these persons had been excited and roused by this opportunity, and without adhering strictly to what they had seen or heard, many of them, who were men of considerable talent and knowledge, used their own good sense, and began to introduce changes into the schools under their direction, and to urge government to proceed in their plans. Thus it may be truly said, that out of this attempt, which in its immediate consequences proved a complete failure, the present improved state of education in Prussia took its rise.

As soon as the inefficiency of Zeller's exertions was fairly proved, the institution underwent another change, which brought it much nearer to the present arrangement of the seminaries. It was ordered that the pupils, whenever they showed talent and inclination for teaching, should be instructed in the institution up to their eighteenth year, and then sent to some of the most intelligent clergymen, who were to employ them as assistants in the elementary schools till they had completed their twentieth or twenty-first year, when they might become schoolmasters. But this plan was not long adhered to, as, in the mean time, attempts had been made to establish seminaries for schoolmasters in other places, and these attempts had been more successful. A way was thus pointed out, by following which it seemed probable that undertakings of this description would be attended with such results as government desired. Those institutions therefore in which unsuccessful attempts had been tried, were by degrees reduced to the form of those which promised a fair

success, and among these was the orphanotrophy of Königsberg.

This seminary has the advantage, as already mentioned, of having connected with it a preparatory school. It owes this advantage to its having been engrafted on a charitable institution which previously existed; for such a preparatory school is not considered as a necessary part of a seminary, and most seminaries in fact are not supported by such an auxiliary institution. As far as we know, preparatory schools are only connected with two others of these institutions, the great seminary at Bunslau, in Silesia, and that at Yenkau, near Danzig; and in both places the preparatory schools owe their origin to the existence of charitable institutions for education before the erection of the seminaries. But though these preparatory schools seem by no means to enter necessarily into the plan of a seminary, they are considered decidedly advantageous for the instruction of teachers of the lower classes; and this conviction has given rise to the idea of connecting a preparatory school with every seminary in Prussia as soon as the requisite funds shall be provided.

The preparatory school is, properly speaking, the school of the ancient orphanotrophy. But it differs from it materially in not giving any longer to its pupils a classical education, but only that of a good middling school. The number of orphans amounts as formerly to about thirty, who receive in the institution board, lodgings, and instruction gratis, just as it is ordained in the statutes of the foundation. Those who show talent, and manifest a decided inclination for the vocation of schoolmaster, are then prepared by a suitable instruction for the seminary. The subjects of instruction for these pupils do not differ from those taught to the other orphans; but some of the branches are taught with more particular care: such as arithmetic, calligraphy, geometry, the vernacular language, reading, history, geography, natural philosophy, and natural history. To this is added instruction in music; which is however of a practical kind, and affords the boys an exercise in playing the piano-forte and the violin. Besides this, the elements of the Latin language are taught, because it frequently happens that the schoolmasters of the town-schools are required to give private lessons in that language, and this seminary is partly designed for educating teachers for the middling schools. It must of course be expected that, among thirty boys, the number of those who have talents and inclination for teaching cannot be large, and, in fact, the number last year did not amount to more than five. Government therefore has opened this school to other boys who are not

orphans, and who show a disposition to become schoolmasters. These boys attend the school gratis, but are provided with board and lodging by their parents and relations. The number of such pupils amounted in 1834 to twenty-three. Before these boys are admitted to the preparatory school, they must submit to an examination, in which they have to prove that they have been completely instructed in the subjects taught in the elementary schools. They must show that they have acquired, 1, a legible hand; 2, a knowledge of the most simple rules of arithmetic, and a certain dexterity in applying them; 3, the elements of geometry, and that they are acquainted, 4, with the principal rules of orthography and orthoëpy, and 5, with the catechism of Luther, and with the history of the principal events in the Bible. Lastly, it is required that they must have an ear for music and a voice for singing. Every year at Easter an examination for this purpose takes place; and those boys who prove that they possess the required qualifications are admitted into the school, and attend it till the completion of their sixteenth year, when they are sent to the seminary.

To be admitted into the seminary, it is not absolutely necessary that the students should have been in the preparatory school. A considerable number of those who attend the seminary have been previously instructed by other persons, frequently by clergymen; but all must submit to an examination before they receive permission to attend the instruction of the seminary. In this examination the candidates have to prove that,

1. They have acquired a more complete and more exact knowledge of the historical portions of the Bible;

2. That they can explain the more easy passages of the Bible;

3. That they begin to master their own language, which is to be proved by writing a composition on some easy subject; as, for instance, the true signification of a proverb, the description of some historical event, or of some natural phenomenon, &c. This exercise ought to be free from any orthographical mistake, and must not contain gross violations of grammatical rules;

4. That their handwriting is not only legible, but good;

5. That they have had some practice in singing from written music;

6. That they have studied an instruction-book of music, and know how to play the pieces from it on the piano-forte, as this degree of proficiency qualifies them to attend the instruction on the organ, and on the theory of music.

7. That they have acquired some knowledge of the organic kingdoms of nature, and are acquainted with the most remarkable plants and animals: a knowledge of mineralogy is not required.

8. That they are likewise acquainted with the principal facts of the history of their own country, and of general geography.

9. That their knowledge of geometry is at least equal in extent to what is taught in the better kinds of elementary schools; that is to say, it must comprehend the elements of form, and the most simple properties of angles, triangles, &c.

10. That they are acquainted with fractions, and have also acquired some idea of the reasons on which this portion of arithmetic rests.

The seminarists remain three years in the institution at Königsberg, which is the time required in most of the Prussian seminaries of schoolmasters for the lower classes. Though there are still a few in which the whole course of instruction, together with the necessary practice in teaching, is included in the course of two years, it begins to be plain that this term is too short. When both complete instruction and the practice of teaching are to be acquired in the short period of two years, it is necessary to form a plan by which both objects may be forwarded together; but in such an arrangement the interruptions of the instruction must be frequent, and the mixing up of both objects must be attended with some confusion, which is found by experience to impede the progress of the students. When, on the contrary, the term is extended to three years, the first two are chiefly employed in completing their acquaintance with the subjects of instruction; and the last year is mainly, if not exclusively, appropriated to acquiring the art of teaching under the guidance of one of the teachers in the elementary school annexed to the seminary. By this arrangement the seminarists have only one principal object in view at once, which with all men, except those gifted with extraordinary genius, is the only way of rising above mediocrity in any branch of knowledge and its applications. Besides this, the latter arrangement offers another important advantage; the seminarists are not appointed to the management of schools at too early an age. As they enter the seminary on the completion of the sixteenth year, their instruction, if it be only a two-years' course, is terminated at the completion of the eighteenth year, which is reasonably considered to be an age at which it would not be prudent to intrust to them the management of a school. At this time of life one or two years make a great difference in maturing the mind and giving it more steadiness and

judgment. It is true that, according to the laws, the seminarists are not to be employed as schoolmasters immediately on leaving the seminary; but as the number of individuals trained in the seminaries for the instruction of the lower classes is not yet quite equal to the demand, up to this moment they have generally entered a school as teachers immediately on leaving the seminary, and consequently are no longer under such strict superintendence as persons of that age ought to be. Whenever the term in the seminaries lasts three years, they commonly complete their twentieth year before they are employed in this manner.

This term of three years, as already mentioned, is divided between two objects—the completion of their own knowledge, and the acquisition of the means of imparting it to children. The first forms their principal, if not their exclusive occupation, during the first two years of their stay in the seminary, and the last year is appropriated to the attainment of the art of teaching.

In most of the Prussian seminaries, and in all the larger ones, the seminarists are divided into two or three classes for the sake of instruction. But in the smaller seminaries they are all instructed in one class, which is the case in the seminary at Königsberg. But it is intended that such arrangements shall shortly be made, that the seminarists shall be divided into two classes, because it is evident that this arrangement will greatly promote their progress. For this reason we cannot lay before the reader a complete scheme of instruction arranged according to the classes; and we must limit our observations to the different subjects taught in the seminaries, to the extent to which they are carried, and to the mode in which they are taught. Though religion forms one of the principal parts of education, it is not instruction in religious dogmas which is principally kept in view; for it is reasonably supposed, that persons who have completed their sixteenth year of age, and have previously had the best kind of education which can be obtained in the elementary schools, must be acquainted with these dogmas. But it is not thought sufficient for a teacher to know them and to understand their meaning and import. He must be able to explain them to others, to apply them to practical life, and to exhibit religious feelings in his own conduct and behaviour. With this view the first object is to excite and maintain religious feelings in his mind and to confirm his religious habits. It is attempted to effect this partly by instruction and advice, partly by the mode of life established in the seminary, and by reading regular prayers, and the singing of religious hymns at the beginning and

at the close of the daily instruction. It is laid down as a principle, that a man whose religion is not intimately combined with his sentiments, is totally unable to teach religion to others with any practical effect, whatever may be his power of instruction or his eloquence. This, therefore, is looked upon as the true basis of religious instruction. At the same time the seminarists continue the study of the Bible and of the tenets of the Christian church to which they belong; and they must be acquainted with both so intimately as not only to be able to answer every question on religious matters, but likewise to explain the different Christian doctrines in a well-connected discourse, quoting for every tenet contained in it the passages of Scripture which prove such doctrines. To this the seminarist must also add the power of speaking to children on religious subjects in such a way, that his reasoning may not only be easily comprehended, but also adapted to affect the minds of the children, and to operate on their habits.

To effect this object, the seminarists are instructed in dogmatical, moral, and religious science, and in ecclesiastical history, and are made acquainted with the most important introductory observations on the whole Scriptures, as well as on every part of it. At the same time the Bible is read with them, sometimes the New and sometimes the Old Testament, partly as a devotional exercise, and partly to instruct the seminarists in the best method of explaining the most difficult passages to children.

Peculiar care is taken to instruct the seminarists in the German language, as this is the most important of the instruments by which they have to perform their labour. In order that they may speak and write correctly, the grammatical part of the language is treated with great attention, and the results of modern researches on the German language are communicated to them, whenever they are of such a nature as to admit of practical application. No less care is taken in bringing them to a habit of writing every kind of prose composition; for which purpose Falkmann's "*Manual for German Composition*" and the "*Methodic*" of the same author are much used. Another kind of exercise consists in making a discourse, or a kind of lecture on any given subject, and frequently without previous preparation. Lastly, the seminarists are requested to read the most classical German authors, poets as well as prose writers, to one another, and they are required to explain those passages which are obscure, which contain allusions, or present any other kind of difficulty.

The seminarists are taught to cast up every kind of accounts with quickness and exactness, and they are also made

acquainted with the rational principles on which every arithmetical operation rests, so that they may be able to explain them to their pupils with clearness and precision. They are frequently exercised in casting up accounts mentally, and they are not permitted the use of figures till they have attained a certain degree of facility in calculating without them. In the instruction itself, pure arithmetic always precedes the application of the operations to particular cases, in order that the seminarists may in this way be accustomed to a methodical proceeding. The printed books used, are the arithmetical treatises of Kaweran, Diesterweg, and Scholz.

Singing constitutes an important subject of instruction all over Germany, even in the schools for the lower classes, especially in the Protestant countries. This is to be attributed to the manner in which divine service is performed in church. Luther was very fond of singing, and he was of opinion that his devotion was considerably increased by the singing of a religious hymn. He therefore promoted, by every possible means, the introduction of sacred hymns into divine service. This practice has continued nearly unaltered since his time, and it is the custom for the whole congregation to join in the song with a loud voice. This renders instruction in singing a necessary part of school education. In the Prussian seminaries singing is taught on the system of Nægeli, a Swiss, in a methodical manner, beginning with instruction in the principles of time, and then proceeding to the theory of harmony, &c. But as the seminarists, before their admission into the seminary, have generally acquired some knowledge of, and practice in, singing, this system is not so strictly adhered to as would be necessary if the instruction was given to mere beginners. It is rather intended to indicate how this art is to be taught in a methodical and scientific way. Besides the study of an instruction-book of singing, the seminarists are required to exercise themselves in choruses, sung by more or less numerous voices, sometimes arranged only for the voices of grown-up men, and sometimes intermingled with those of boys. In this way choruses and motets of Haydn, Bach, Mozart, Klein, Rungenhagen, Rink, Schultz, &c. are studied and publicly sung on some solemn festival, as, for instance, on the foundation-day of the institution, at a public examination, &c.; sometimes also in the cathedral at Christmas, Easter, &c. In that portion of the Prussian dominions in which Königsberg is situated, singing is not so extensively diffused as in some other provinces; but as it is considered one of the most efficient means for harmonizing the mind and exciting proper feel-

ings, this part of the instruction of the seminarists is most carefully attended to, and the exercises are systematically practised. It is required of them to sing more easy compositions at sight.

Those seminarists who show talent for music receive also instruction in the rudiments of harmony and thoroughbass, according to the method of Logier. This branch of instruction is carried so far that they are enabled to supply with precision all the omitted voices when only one of them is given, to compose preludes and postludes to every piece of sacred music, and to compose tunes and music to any given poetry. This last accomplishment, of course, can only be attained by a few of the seminarists.

As many of the seminarists may be appointed to schools, where the teacher is required to play the organ of the parish church, instruction on this instrument is considered an integral part of the education of a schoolmaster; and in the written testimonials, which are delivered to the seminarists on their leaving the institution, it is expressly inserted, if they are qualified to act as organists. To obtain such a testimonial the seminarist must be able to play at sight every given piece of sacred music with the pedal bass figured only and the simple melody; and to play it on an organ with pedals; besides, he must know how to compose preludes, postludes, and interludes, and be acquainted with the theory of music, or the thoroughbass. The seminarists also receive some instruction in playing the violin, because this instrument is the most proper for being used in teaching singing. Other instruments are taught only to a few, and for the purpose of enabling them to accompany the larger choruses with instruments in their exhibition at some solemnity. In this branch also, other seminaries of the Prussian dominions are much more advanced than that which we are here describing. In Silesia, Saxony, and other parts of the monarchy, music is much more diffused among the people, and the seminaries are accommodated to this taste. In Breslau, Bunzlau, Erfurt, Magdeburg, Halberstadt, the seminarists play large symphonies with great taste and precision.

The study of mathematics is carried to a considerable extent. Those seminarists who show talent for this branch of knowledge go through a complete course in the geometry of lines, planes, and solids, and are instructed in the art of surveying, but without the use of artificial instruments. The instruction in algebra comprehends simple equations, with one or more unknown quantities; and the seminarists are not allowed to write down the equations, but must solve them

mentally. Besides this, they are instructed in proportion, the doctrine of progressions, the binomial theorem, and pure and affected quadratic equations.

As the Prussian government desires to diffuse as much as possible the knowledge of nature, and to excite the lower classes to observe its productions, the study of natural history is much attended to in all seminaries. A general view of the three kingdoms of nature, as they are called, is given to the seminarists, and followed up by an enumeration and description of the principal products of each. More minute particulars are then given to them on such productions as occur in the Prussian territories. At the same time care is taken to show the different applications which are made of these productions in domestic economy and manufactures; and thus technology is united to natural history. The small natural history composed by Schubert is the manual for the seminarists; and small collections of mineralogy, of birds, insects, &c., are shown and explained to them, in order to render the instruction more permanent.

Natural philosophy is treated nearly in the same manner. For a long time this science has been considered one of the principal subjects of instruction, and has therefore been taught in all public schools and private institutions for the middling and upper classes. But as this branch of knowledge has made wonderful progress in modern times, the German teachers have thought it necessary to confine their instruction to general principles. Thus the student obtains a general view of the whole, and of its principal divisions, and is enabled to complete his knowledge at a future time, if he should find it advantageous to enter on the minute study of any one branch. The number of elementary treatises on natural philosophy in the German language is very great, and each is designed and adapted for a peculiar description of schools. In the seminary of Königsberg—and we think in most others too—the manual used is that of Herr, entitled, “Short View of the most useful Parts of Natural Philosophy” (*Kurzer Inbegriff des Wissenwürdigsten aus der Naturlehre*). The explanation of the laws of nature is illustrated by well-adapted experiments as far as it is possible. The apparatus for such experiments is as simple as it can be made, in order that the future schoolmaster may be enabled to explain many of the natural phenomena by means which the domestic economy of every house affords. Some of the seminarists who show an inclination for this kind of study are instructed in making instruments, such as thermometers, or small models of pumps, machines with wheels, &c.

The instruction in history comprehends general history and the history of Prussia. Of ancient history only the principal facts are taught, but that of the middle ages is treated more extensively, and still more so modern history. The last, inasmuch as it is more intimately connected with the history of Prussia, is taught still more minutely. The instruction in ancient history and in that of the middle ages is continued for a year two hours weekly, and as much time is appropriated to the study of modern history and that of Prussia in particular. The object of this instruction is not the accumulation of a great number of historical facts in the memory of the seminarists, but the implanting of such facts as are connected with the life and occupations of the great body of people, and with their condition. For this purpose the seminarists are exercised in narrating orally a larger or a smaller portion of history which is given to them, in doing which they have to keep in view some particular end or object, and are required to arrange their matter in a connected and perspicuous order. The manual used for this branch of instruction is that of Tetzen.

Mathematical geography, or the use of the globes, is only taught so far as it is necessary for the explanation of the most important phenomena connected with the subject and the use of maps. It is followed by a general survey of the divisions of the globe; in doing which all the existing political divisions are excluded, in order that the characteristic features of the surface of the earth may be known and impressed on the mind with distinctness. After this has been effected, the present political divisions are briefly added. This instruction takes one year and a half, and the remaining half-year is employed on the geography of the Prussian territories, and more especially of the province in which the seminary is situated. For general geography the usual manual is that of Volger, but for the geography of the different provinces different small books are used.

As persons who possess some knowledge of the human body are commonly more attentive to the preservation of their health than those who are ignorant in this respect, it is considered that the welfare of the great bulk of the people will be promoted by the dissemination of such knowledge among them. With this view the seminarists receive some instruction of this kind in a weekly lesson during one semestre, in which care is taken to point out what is conducive and what is hurtful to health, as well as the most simple and approved remedies. With this instruction is united a short course of psychology, in which the chief phenomena of the human mind are indicated and explained.

The last subject in which the seminarists are instructed in the seminary is drawing. It is evident that this kind of instruction cannot be carried to a great extent in elementary schools. The most important part is connected with the elements of mathematics, by which the seminarists are made acquainted with the regular and irregular forms which frequently occur, and learn to draw them. But besides, all of them are bound to acquire some facility in copying drawings, and peculiar attention is paid to instruction in perspective. Those seminarists who show some talent not only learn to draw single objects, but also landscapes. The instruction is given according to the method of P. Smid, and in the practical application of it Ramsauer's instruction in drawing is used.

Such are the subjects in which schoolmasters for the lower classes are instructed in the seminary at Königsberg, and we do not think that there is any material difference in this respect between it and other seminaries. For as every change in the subjects of instruction either emanates from government, or can only be introduced by its express consent, the seminaries are now brought near to one uniform standard, and consequently carry their instruction nearly to the same point.

It is obvious that during the course of this instruction many opportunities occur of explaining to the seminarists the best method in which every branch of knowledge, or some more difficult parts of them, may be taught and adapted to the comprehension of children; and such opportunities are not allowed to escape. Experience is rapidly increasing the number and contributing almost daily to the perfection of the methods. Nevertheless it is thought indispensable to instruct the seminarist separately in the art of teaching, or in *pædagogic* and *methodic*. This part of their instruction is both theoretical and practical.

The third year of the stay of the seminarists in the institution, as already observed, is more especially employed in receiving instruction in the art of teaching; but they are previously made acquainted with the theoretical part of it. During the first year, for two hours a week, the director of the seminary, or one of the teachers, instructs them in general and special *pædagogic*, not by delivering lectures, but by entering into conversation with them. First, the general principles and the principal subjects of education are explained; and afterwards, the duties of the teacher, not only as a person who has to teach, but also as one who has to educate the people. In these discourses the future teacher hears how he ought

to direct his efforts towards the preserving and improving the health and mental and moral qualities of those who will be confided to his care in an elementary school. To this is added a short view of the history of education and of instruction, more especially in Germany. In order that this information may not escape the memory of the seminarists, the teacher gives them a manuscript, in which the principal points of this instruction are explained, or, as is the case in many other seminaries, the seminarists use for their further instruction Harnisch's "*Manual for Schoolmasters in Elementary Schools.*"

A similar course is adopted in the second year for the instruction in methodic, or in the art of teaching. After the general principles of instruction have been fully explained, all the subjects which are to be taught are taken into consideration, one after the other, and the extent to which every subject is to be taught, and the manner in which it may be taught with the best effect, are ascertained. At the conclusion of these discourses a number of observations are made on the discipline of schools, the arrangement of the subjects, the relation in which the schoolmaster is placed towards his superiors, the inhabitants of the parish, the parents of the children, &c. During these discourses the seminarists are made acquainted with the principal treatises and books on these matters, many of which are given to them to read.

To induce the seminarists to increase their knowledge and to complete their views respecting the best method of educating and instructing children, they are requested to read books on such subjects, and are allowed access to the library of the institution, which contains a pretty complete collection of books on pædagogical subjects, and is placed under the care of one of the teachers. A kind of control is established at the seminary for the purpose of ascertaining whether or not the books have been read by the seminarists, and in what manner and with what effect. Every seminarist before he leaves the institution is bound to deliver to the committee of examination a catalogue of the books treating of pædagogic or methodic which he has read, and an abstract of each of them, which ought to be short, but in some manner complete. This practice, as may readily be conceived, is attended with very good effects in keeping up the industry and attention of the seminarists.

When the theoretical instruction of the seminarists in the art of teaching has been nearly completed, the practical part begins. According to the laws of Prussia, a school is attached

to every seminary, in which a sufficient opportunity is afforded to the future teachers of elementary schools of exercising themselves in the application of what they have been taught. In the larger seminaries such schools are divided into two or even three classes; but at Königsberg it contains only one class with three divisions. This arrangement is rather to be attributed to the want of sufficient accommodation in the building; but instead of being considered a disadvantageous circumstance, it is rather thought advantageous, and for this reason: By far the greatest number of the elementary schools in the province of Königsberg, for which the seminarists in this institution are exclusively designed, have only one teacher. Now it is evident that among these children, who frequently amount to fifty and more, there must exist such a difference in age, knowledge, and mental faculties, that, if possible, they should be divided into three or more classes. But still they are to be instructed by one teacher. It is therefore very advantageous that such a teacher should have learnt by experience how he has to manage the matter, in order to be able to teach properly a school consisting of three divisions.

In the seminary-school the young teachers begin their practical exercises with teaching a division in the presence and under the direction of one of the teachers, and they continue to do this for some time, till the director of the seminary is convinced that their progress in the art of teaching has been considerable. He then places a whole division under their independent exertions for a fixed period, and observes their skill and the progress of the children. At the end of every semestre an examination takes place, in which the seminarists alone examine, before a committee, the divisions which have been confided to their instruction.

To support and excite the industry and emulation of the seminarists, a conference between them and the teachers of the seminary is held once a month, in which their scanty experience is supplied by the more extensive experience of the director and of the teachers. The discussion which takes place in such conferences relates especially to the instruction itself, to the discipline, the treatment of the class or division, to particular children and their perverse inclinations, and the most proper means of correcting them. In these conferences the director of the institution encourages the open and independent declaration of their opinions by the seminarists.

The senior seminarists are by turn charged with keeping the lists of the absentees and the other school lists; they have likewise to receive the children when they enter the school

before the beginning of the instruction, to examine those who are not cleanly, to superintend them during the play hours, to observe them when they leave the school to go home, &c. By a proper attention to these points they are fitted for the due exercise of their future vocation.

After a stay of three years in the institution the seminarist is dismissed to be employed as teacher in an elementary or middling school. But before his dismissal he must again submit to an examination, and to rather a rigorous one. This examination is threefold. It consists of some written compositions, of a display of his skill in teaching, and of a personal examination by the committee.

The compositions are made in the presence of one of the teachers, and consist—1, of a catechetical essay on a given passage of the Bible, or a section of the Catechism—2, another essay on some branch of pedagogic or methodic—3, of a composition on general instruction in some scientific subject—4, of the solution of some mathematical problems—5, of a composition of sacred music for the organ, with prelude, interlude, and postlude, as well as another to be sung by three or four voices. The seminarists must prove the skill which they have attained in the art of teaching, by catechising a division of the school in the presence of the committee on some of the tenets of the Protestant religion, and afterwards by some lessons on other subjects. The subjects of this part of the examination are announced to the seminarists the day before, that they may have time to prepare themselves for this display of their skill and talents.

The personal examination comprehends all the branches of knowledge in which they have been instructed during their stay in the institution. They must show—

1. That they have a complete knowledge of the religious tenets and of the moral principles of their persuasion, and that they are able to discourse on any of these subjects with perspicuity and precision.

2. They must be fully acquainted with the memorable events contained in the Bible and understand how to explain any one of them in a comprehensive way to children.

3. They must have acquired the knowledge of the language, so as to know how the sounds, syllables, and simple words are formed, how the derivative and compound words are made, and lastly how the termination of words are changed, sentences formed, and a whole composition arranged. They must show that they know how to apply this knowledge to every peculiar case.

4. They must have an historical knowledge of the different methods of teaching the several branches of knowledge, and how to apply them ; more especially they must know the different methods used in teaching to read, to draw, and to perform the common rules of arithmetic.

5. They must be able to play the ordinary pieces of sacred music by heart, and the more difficult and those which do not occur frequently, with the assistance of written music.

6. They must be well versed in all kinds of calculations, both on paper and mentally, and they must prove that they know the reasons on which each operation rests, and that they are able to explain them with perspicuity.

7. If the seminarists wish to be employed in the town-schools, they must be acquainted with the fundamental principles of geometry, as well as with the elements of algebra.

8. They must show a knowledge of the more practical parts of botany, zoology and mineralogy ; for instance, they must be well acquainted with the poisonous and medical plants, and with the trees growing in their country, and their different uses in domestic economy or the mechanical arts.

9. What they must know in natural philosophy, history and geography, has been indicated before.

10. Those, who wish to be employed as organists, must be able to play every piece of sacred music with the pedal bass figured only and the simple melody given on an organ with pedal, and to compose preludes, interludes, and postludes ; besides they must be so far acquainted with the theory of music, as to be able to compose the accompaniment of every given tune for the organ, or to arrange it for three or four voices.

After the examination, written testimonials are delivered to the seminarists who are going to leave. These testimonials are divided into three classes, and numbered I. II. III. Those seminarists, who have proved that they have acquired all the knowledge required by the regulations of government, receive the testimonials numbered I., with the word *distinguished*. Those who have not completely acquired that knowledge in all branches, but who have proved that they are well acquainted with the principal subjects, that is, with religion, language, arithmetic, and singing, receive testimonials numbered II., with the word *good*, sometimes *very good*, sometimes *nearly good*. Lastly, those who have not acquired a complete knowledge of the above-mentioned branches, but nevertheless have made such progress in some of them, that they can be employed in less numerous and poorer schools, receive testimonials numbered III., with the word, *sufficiently instructed*.

According to the first regulations issued by government in this matter, all those who had not obtained the testimonials numbered I., were to submit to another examination, by which they should prove that they had supplied their defects. But after some time the directors of the seminaries were requested to give their opinion on this point, and nearly all of them declared, that many of the seminarists could never obtain such a degree of knowledge as to entitle them to the testimonial numbered I., because they did not possess sufficient talents. But nevertheless most of them were very industrious men, and would doubtless be very good schoolmasters. The directors, therefore, thought, that only those who had received testimonials numbered III. should submit to a second examination before they could be employed as teachers in elementary schools; and government acceded to this proposal.

The whole institution contained, in 1834, in its different divisions, 192 seminarists and children, namely,

<i>a</i> , in the seminary,	
1, seminarists, who belong to the orphanotrophy, and received board and lodgings gratis . . .	5
2, seminarists, who are maintained by their relations, and visit the seminary gratis* . . .	38
	<hr/>
	43
<i>b</i> , in the preparatory school, or what is properly called the orphanotrophy,	
<i>a</i> , orphans, receiving board, lodgings, instruction, &c., gratis . . .	24
<i>b</i> , boys, who are destined for entering the seminary, and maintained by their relations . . .	25
	<hr/>
	49
<i>c</i> , in the seminary-school, boys and girls . . .	100

The number of teachers in this institution is five, namely the director of the seminary and four others.

In the last eight years, or since the complete organization of the seminaries in Prussia, 87 seminarists have been educated in this institution :—

* Since the beginning of this year government has ordered that six seminarists, who are poor, but industrious, shall receive a monthly allowance of two dollars (six shillings).

	No. I.	No. II. (very good)	II.	No. III.	Total.
1826 (Michaelmas.)	„	2	2	„	4
1827	„	3	1	1	5
1828	„	4	3	„	7
1829	1	3	3	2	9
1831 (Easter)	1	3	7	2	13
1832	1	2	9	5	17
1833	1	4	9	2	16
1834	5	5	3	3	16
	<u>9</u>	<u>26</u>	<u>37</u>	<u>15</u>	<u>87</u>

Of this number some were employed in town-schools, others in elementary schools in the country, and a few as private teachers in families ;

in town-schools . . .	38
in country-schools . .	33
as private tutors . . .	16
	<u>87</u>

FOREIGN MUSEUMS, LIBRARIES, AND LITERARY INSTITUTIONS.

SOME very interesting papers relating to museums, libraries, and literary institutions in foreign countries, have recently been printed by order of the House of Commons.

The information contained in these papers has been transmitted by our ministers resident at foreign courts, in compliance with instructions to that effect contained in a circular letter addressed to them in October, 1834, by the Secretary of State for Foreign Affairs. To assist them in making their inquiries relative to the condition of and system of management used in different national libraries and museums, the following list of queries, which had been drawn up by Mr. Benjamin Hawes, Jun., the member for Lambeth, was inclosed to each of the ministers addressed ; and to these queries definite answers were required.

MUSEUM.

1. Is there a national museum devoted to the arts, antiquities, or natural history in the capital of ——— ?
2. Under whose control and direction is it placed ?
3. How many directors are attached to it, and what are their salaries ?
4. Into what departments is it divided ?
5. What are the general annual expenses ?
6. Out of what fund are they defrayed ?
7. Who are the principal directors at present ?
8. What are the bye-laws regulating the admission of the public to the museum ?

LIBRARY.

1. How many public libraries are there in the capital of ——— ?
2. How many librarians attached to each of them, and what are their salaries ?
3. What is the annual expense of books ?
4. What the general annual expenses ?
5. Out of what fund are they paid ?
6. What bye-laws regulate the admission of the public ?
7. Who are the principal librarians at present ?
8. What is the number of volumes in each ?
9. What the number of manuscripts ?
10. What is the nature of the government of these institutions generally ?
11. Are there any annual printed accounts or reports relating to them ?
12. What is the number of provincial libraries ?
13. Are they under the superintendence of any government authority ?

The printed papers before us contain answers to these queries, from St. Petersburg, Copenhagen, Brussels, Wirtemberg, Florence, Naples, Frankfort on the Maine, Dresden, and Bern. The statement from Russia occupies by far the most prominent part in the parliamentary returns; it fills more than two-thirds of the entire space occupied by all the returns just enumerated, and, in addition to its greater length, the documents transmitted by our minister at St. Petersburg afford the most useful and interesting information upon all the heads of inquiry embraced in the queries.

We shall, without further preface, proceed to give a condensed abstract of the contents of these papers.

RUSSIA.

THE imperial public library at St. Petersburg was originally the library of Joseph Zaluski, bishop of Kiof, and was transferred from Warsaw to Petersburg in 1796. In the space of forty-three years Zaluski collected at his own cost more than 200,000 volumes; his brother, André Zaluski, bishop of Cracow, enriched this valuable library with many books taken from the museum of John III., king of Poland, and with others collected from the libraries of his three uncles, André Olszofski, primate of the kingdom of Poland, Prince André Chrysostome, bishop of Warmie, and Louis Barthelemi, bishop of Plock. In 1747 he gave the public access to this united collection of books, and granted an annual sum for its management and increase. After the death of this prelate, his brother, Joseph Zaluski, augmented the library still further, by numerous

works,* and bequeathed it in 1761, together with the house in which it was deposited, to the College of Jesuits at Warsaw. After the suppression of that order, in 1773, the library was placed under the management of the commission of education, and finally was transferred to St. Petersburg in 1795. The books were conveyed this distance by land, and through roads rendered almost impassable by the autumnal season; several cases received considerable damage in consequence of the inclemency of the weather, others were broken or injured, and the books which they contained were spoilt, torn, or defaced. The loss thus occasioned was however much exaggerated, and was not so considerable as was generally supposed.

This library, after being deposited at St. Petersburg, was found to contain (February 23, 1796) 262,640 volumes, and 24,573 engravings. It was at first placed in a building near the palace of Anischkof, and the superintendence of assorting and arranging the books was confided to Mr. Kirschbaum, councillor of state, attached to the cabinet; but it was Mr. Antonofski, with others under his direction, who engaged efficiently in this laborious work. The packing of the books being made in haste at Warsaw, they were mixed together without any regard to order, volumes of the same work being dispersed in different cases. When the library had arrived at St. Petersburg, it was considered necessary to ascertain immediately the exact number of the volumes it contained; and that no time might be lost, a catalogue was made as the books were unpacked, without observing any order, or any system of classification. The promptitude with which this work was performed did not allow even the insertion, in the catalogue, of the year and place in which the books had been printed. This first labour accomplished, a new distribution of the books was made, in order that a catalogue might be formed in which they should be arranged according to their different subjects and languages. This arrangement was commenced under the direction of the Count Choiseul Gouffier. A great number of works was transferred to the College of Medicine, and others,

* Denis, in his introduction to 'La Connaissance des Livres,' published at Vienna in 1777, speaks thus of Zaluski's library.—The celebrated library of Zaluski at Varsovie was opened to the public in 1746; it contains at present nearly 300,000 volumes. Benedict XIV. issued a bull of excommunication in 1752 against any who should dare to damage or injure this library; but many books were notwithstanding stolen, especially during the late troubles. In 1747 the laborious bibliographer, J. Dan Janozki, published an account of rare printed books in Poland, and in 1752 he published a catalogue of the manuscripts contained in this library. After the death of its founder, the Bishop of Kiof, the King, and the republic took possession of this treasure, notwithstanding the exertions of his heirs to preserve it to themselves.

as well as a part of the engravings, were given up to different establishments. In 1801 the remainder of the library was transferred to a building constructed for the purpose. The building and its appurtenances, together with the land on which they stand, were assigned and given to the imperial library, by an express order from the emperor. This handsome structure was begun in the reign of the Empress Catherine, but was not entirely finished till that of Alexander. The original intention of Catherine, it is said, was to connect this edifice with the palace of Anitschkof, by a large garden, and by covered galleries, planted with trees of different kinds, and protected from the cold. She had the project of assembling on this spot every thing interesting which related to the arts and sciences and to gymnastic exercises; she had also proposed to erect an observatory at the top of the library building. Unforeseen obstacles, or the death of the empress, suspended the completion of this grand design. After the library was transported to the new building, an attempt was made to place the books in the book-cases with some attention to arrangement and method; but in consequence of the age and increasing infirmities of the then director, Mr. D'Augard, and of the want of a clear and well-defined system of classification, the work proceeded but slowly, and the progress of those employed was constantly impeded by difficulties without number, till, at length, in 1808, Mr. Olenin, councillor of state, was nominated joint-director-in-chief with Mr. D'Augard. From this time the most prompt means were adopted for putting the library into such a state, that it might be opened with advantage to those who wished to consult the works which it contained. In taking into consideration the arrangement already followed, it was found to be so faulty that the whole was begun anew under another system of classification. More book-cases were added, and duplicates, useless, and incomplete works were discarded or exchanged for other works. All the books written in the Russian language, amounting to 20,000 volumes, were to be collected, and works written in other languages, which had appeared since 1774, were to be procured. Mr. Olenin considered that at this time the library comprehended, in general, everything which relates to the arts and sciences, and to the belles-lettres. The theological, and, next to it, the historical and literary department, were the most complete. On theological subjects alone there were above 80,000 volumes. Among the historical works, those of a local nature, containing the particular history of different towns, were by far the most numerous; and a valuable collection of the classics and bibliographic works formed the principal subjects in literature. Works on philosophy, mathematics, physic, voyages, and anti-

quities, were very incomplete. Since that time the library has been much enlarged. It now contains nearly 400,000 volumes of printed books, and 16,000 volumes in manuscript. The present arrangement and management of the library were devised under the direction of Mr. Olenin, in 1808, whose system appears to be excellent and efficient. Before describing it, however, a short detail of the reasons which induced its adoption by the director will, perhaps, be found interesting. Mr. Olenin observes, that the most celebrated bibliographers have generally classed, in their catalogues, works according to their respective subjects; but they have only slightly explained the reasons which have induced them to form this classification. Several have not even mentioned them; others, such as Fontanini and Father Garnier, appear to have followed the order of the four faculties; theology, jurisprudence, and history, form each a particular class in their systems, while all the other sciences, as well as the arts, are united and confounded under the general name of philosophy. Father Garnier, being a very zealous partisan of the doctrines of the church of Rome, added to his divisions a particular class in theology, under the name of heterodoxy. Martin and De Bure, adopting in part the same system, are equally silent as to their reasons, and mix indiscriminately in one class every thing relative to the arts and sciences.

Leibnitz, the contemporary of Garnier and Fontanini, being aware of the inconvenience of their divisions, separated all subjects into eight classes, namely: 1. theology; 2. jurisprudence; 3. medicine; 4. intellectual philosophy; 5. mathematics; 6. physics; 7. philology; 8. history. No one followed a more regular and systematic order than this celebrated man; but distracted by his numerous and important occupations, he probably had not leisure to carry his system to perfection by establishing the necessary connexion between the arts and sciences and literature.

The systems of the Abbé Girard, and of Mr. Denis, Librarian of the Theresian College at Vienna, are remarkable for their singularity, especially that of the former. Abbé Girard supposes man in his primitive or savage state of nature, and divides his subjects into six principal classes: 1. theology; 2. nomology; 3. historiography; 4. philosophy; 5. philology; 6. technology. Beginning thus with the most abstruse sciences, he passes successively to the most simple subjects of knowledge, and finishes with those which most nearly approach to the capacity of man in a state of nature. This system is also remarkable for the author's predilection for the number *six*, which he employs both in the divisions and subdivisions, and in consequence sometimes forms a whimsical mixture of the most

opposite subjects; so that the Koran is found in the same division with the Bible, and the Corpus Juris is classed with the rules for games of chance. Mr. Denis divides his bibliographic system into seven parts, in conformity with the scriptural text—‘Wisdom has builded her house, she hath hewn out her seven pillars.’—Proverbs, c. ix. v. 1. Lastly, a new bibliographic system has recently appeared in the Universal Gazette of Literature at Jena. This system divides the subject into sixteen principal classes. Their distribution is new, arbitrary, and without any connexion. Each class includes so great a number of divisions and sections, that the reader, engaged in this bibliographic labyrinth, loses himself in its intricacies, and discovers its outlet with difficulty.

Considering this diversity in the principles of classification, as adopted by others, Mr. Olenin determined to form an entirely new system for the imperial library. In this system all the subjects are classed under the three general heads of—*scientiæ*, *artes*, and *philologia*; in the subdivision of these classes care is taken to unite ‘*les arts aux sciences par les liaisons qui paraissent les plus naturelles.*’ The sciences are divided into three principal classes. The first comprehends those which are purely intellectual, under the name of *scientiæ rationales*; those which result from physical investigations (‘*les connaissances physiques*’) form the two other classes; the second, under the name of *scientiæ naturales*, and the third under that of *scientiæ exactæ*. The science which defines the relation and duties of man towards God, or theology, naturally occupies the first place in the class of intellectual sciences; this is followed by jurisprudence, which determines the social duties of man; philosophy is placed next in order, the principal part of which relates to the two preceding sciences and to ethics. But as the sciences relating to physics for the most part verge on philosophy, the natural link between the first and second classes will be formed by means of history, which is divided into two parts, the history of nations, which belongs to the first class, on account of the aid and illustration which it furnishes to the subjects comprised in this class; and second, natural history, which forms the first section of the second class, and which serves as an introduction to the study of medicine, chemistry, and natural philosophy. The principles of these sciences connect them with the third class, that of the exact sciences. The transition from the sciences to the arts will be in like manner simple and natural, through the mechanical arts, which form the first class of the second general division. *Artes liberales* and *artes oratoriæ* are comprised in the second and third classes of this division. The art of oratory, which includes eloquence and poetry, thus forms part of the second general division; and the

third division comprehends *philologia* in its strictest sense: this is divided into three classes; 1st, the general and particular knowledge of languages, under the name of *linguistica*; 2nd, collections of works upon one or several sciences; as for example the complete works of those authors who have written upon various subjects are classed under *polygraphia*; and lastly, the general analysis of all known works under the head of *critica*. In this manner the last general division, or *philologia*, forms the connexion between *artes oratoriæ* and *scientiæ rationales*, and may equally serve either as an introduction or a complement to the arts and sciences comprehended in the two other divisions.

According to the above arrangement the works of this library are classed in numerous subdivisions, so that every book is placed in its distinct and proper situation, as relates to the subject of which it treats, and the student in any particular branch may at one glance ascertain the exact amount of information he may expect to find, and the number of works to which he can have recourse for assistance in his labours. The facilities thus afforded can only be duly appreciated by those who have no other guide for their researches than an alphabetical catalogue of the names of authors arranged without any regard to the subject matter of the works on which they have written.

The titles of the divisions and subdivisions, under which the works of this library are classed, occupy twelve folio pages in the paper before us; it would be neither interesting nor useful to give these at length, but the results thrown into a tabular form will at once show the nature of the plan.

<i>Scientiæ Rationales.</i>	<i>Classes.</i>	<i>Classes.</i>	<i>Classes.</i>
1. Theologia	{ is divided into }	11, { and these again are subdivided into }	33, { and some of these are still further subdivided, making the whole number }
2. Jurisprudentia	„	3,	13, { 61 }
Philosophia	„	4,	14, { 43 }
4. Historia	„	3,	6, { 32 }
<i>Scientiæ Naturales.</i>			
5. Historia Naturalis	„	2,	„ 6
6. Medicina	„	3,	11, 23
7. Physica	„	2,	„ 7
8. Chymica	„	2,	„ 7
<i>Scientiæ Exactæ.</i>			
9. Mathesis	„	2,	7, 28
<i>Artes.</i>			
1. Artes Mechanicæ	„	5,	9, 16
2. „ Liberales	„	9,	26, 33
3. „ Oratoriæ	„	2,	14, 49
<i>Philologia.</i>			
1. Linguistica	„	8,	„ 16
2. Polygraphia	„	2,	„ 7
3. Critica	„	6,	8, 12

Total 366

There are three catalogues formed of these works. 1st, A catalogue alphabetically arranged according to the subjects. 2nd, An alphabetical catalogue of authors. 3rd, A catalogue *raisonné*, in which the subjects are classed according to the above arrangement, with observations upon different works; those which are rare editions are more particularly noticed. The means taken by Mr. Olenin for producing order out of chaos are detailed at large by himself; we can only briefly indicate the general outline of his plan. The title, at full length, of each work was written on a separate card, together with the name and surname of the author, of the editor, and of the printer, the date, the place in which it was printed, and the number of volumes of which it consists. The cards thus prepared were distributed, at the close of every day, among the librarians, each taking those, the titles of which corresponded to the division or to the class which he had under his particular superintendence. When the same work was found to treat of different subjects, the librarians had to decide among themselves to which class it principally belonged, before it was assigned to the division and subdivision indicated in this system. Each librarian, having collected the cards which belonged to his division, wrote at the top of the left column the initial letter of the title; below this letter and in the same column he wrote the class, division, and section, to which the work belonged. In the right column (the title, &c. having been already written in the middle of the card) the name of the author was written at top; and below this, in Roman characters, the number of the room assigned to books of this class. The book-case in which it is placed was indicated by a letter in the same column, and below this was a number assigned to the particular book in the catalogue. The card thus prepared was transmitted to the librarian charged with making the alphabetical catalogue of books, according to their subjects, that it might be copied and inserted in the proper place. The same card was then delivered to another librarian, charged with making the catalogue in alphabetical order, according to the names of the authors, with the list of their works; and the place of the work was in like manner assigned to it in this catalogue. These two catalogues being finished, the cards were given to the librarians intrusted with the compilation of the third and last catalogue. The critical remarks which required but little space were directed to be written on the reverse of the cards, but those which were more extended and more detailed were to be written in separate sheets (*cahiers*), at the head of each of which the card, containing the title of the book, was to be pasted. These were then afterwards transferred to the catalogue *raisonné*.

This establishment (the imperial public library of St. Petersburg) is under the management of a director, who receives 3000 roubles (£137. 10s.) table-money; a joint-director, without emoluments; seven librarians each at a salary of 2700 per annum (£123. 15s.); four sub-librarians, 1200 (£55.); three clerks or copiers, 600 (£27. 18s.). The director-in-chief is nominated by the emperor, and the joint-director is confirmed upon the nomination of the director; all the other officers are appointed by the director.

The annual sum appropriated to the purchase of books varies from year to year, and is sometimes as much as 7000 roubles (£320. 16s. 8d.). It arises from the savings made upon the sums allowed for the support of the different houses belonging to the library.

The annual expenses for the management of the library, and the salaries of those employed, amount to 45,000 roubles (£2062. 10s.). The funds required for this purpose are furnished by government. The public are admitted to visit this establishment on Tuesday in each week, from eleven o'clock in the morning till three o'clock in the afternoon; and on Wednesdays, Thursdays, and Fridays, from ten o'clock in the morning till eight o'clock in the evening, to read and make extracts. The library is divided into sections. Each librarian has under his direction one or more of these sections. The principal duties of these librarians, and those under them, are to watch over the preservation of the books; to continue the respective catalogues on the same uniform system; to receive those who come to visit the library, and to furnish them with such works as they require which are included in the respective sections under their care.

One of the librarians, or sub-librarians, is selected by the director to manage, under the immediate inspection of the joint or acting director, the affairs of the library. This officer is charged with the official correspondence. Another officer is appointed to superintend the domestic arrangements of the establishment; he is likewise cashier, his accounts being under the inspection of the acting-director.

Besides the books obtained by the funds expended in the purchase of new works, and of those in which the library is deficient, it has the right of demanding two copies, gratis, of every work printed throughout the empire. To augment the number of manuscripts, the director has the right of demanding collated copies of all writings which relate to the history of Russia, which are preserved in the different archives, as well as in ecclesiastic and civil establishments. Foreign works may be imported for the library without any duty being paid on their binding. The duties of the functionaries employed in the library

are very accurately defined in the regulations for the management of the establishment. It would far exceed our limits to enter into these minutiae, but they appear well calculated to insure by strictness and method the efficiency and good working of a well-designed system. No one but the director is allowed, under any pretence whatever, to take a book out of the library for his own use; and even he is obliged to give a receipt, in which the title of the work is written at full length. This receipt is retained by the librarian under whose care the section containing the work is placed, and is not given up till the book is returned and examined in order to ascertain that it has received no damage. The exclusive privilege of the director in this respect does not extend to the manuscripts, which are on no occasion allowed to be taken from the library.

The regulations concerning visitors to the library are also very minute, and the particular care to be taken of the books is much insisted upon. It is required of visitors, that they will above all be careful not to bend the leaves; not to turn them too hastily, at the risk of tearing them; not to touch or rub the characters, designs, and decorations; not to place one manuscript upon another already open, lest the binding of the first should be damaged, &c.

Admittance is granted to all classes who are 'decently clothed.' A person desirous of reading or making extracts in the library has only to make application for this purpose on any Tuesday, when the library is open indiscriminately to the public. He writes his name, together with the titles of the works which he wishes to consult, on a card; the librarian in attendance, on receiving this, immediately gives him a ticket of admittance for any length of time he may require, which, on its being shown to the porter, secures him free admission every day and hour in which the library is open. Those who do not find it convenient to make application personally for a ticket, may obtain it by writing to the librarian in attendance. For the convenience of persons frequenting the library, the tables and desks are provided with drawers in which they may deposit their papers, and for greater security affix their seal to any of them until the work in which they are engaged be finished.

The articles, amounting to more than twenty in number, for the regulation of those who visit the library, are printed in the Russian, French, German, and Latin languages, and fixed to the doors of the library, that the public may have full opportunity of seeing them. The last of these articles is curious, as appealing to the vanity and ostentation of individuals in a more open manner than is in accordance with

our notions.—All gifts to the library will be received with gratitude on the part of government. The names of the donors, if they are known, will be printed, with permission of his majesty the emperor, in the gazettes, and inscribed upon the pillars which decorate the interior of the library. The donors may also hope, in proportion to the importance of their gifts, a still further recompense by other marks of good-will on the part of the sovereign.

The following is a good regulation, and will serve as an example of the minuteness of the details :—‘ If it should happen that several persons wish for the same book at the same time, and that there is not more than one copy in the library, this book will be furnished according to the profession of those requiring it ; thus works on theology will be given to ecclesiastics in preference to laymen, and books which treat of the art of war to military men in preference to civilians. If the same book be asked for by several persons of the same profession at the same time, the librarian must use his discretion as to whom he allows the first reading.’

Persons in order to be eligible as librarians to this institution are required to have had a liberal education, to understand foreign languages, including those of the East, and above all Greek and Latin. It is more especially required that they may be known for their good conduct and their zeal for the service.

The Roumaintzof Museum at St. Petersburg was left for the use of the public by the late chancellor, Count Nicolas Roumaintzof. It contains a library, a collection of minerals and of medals, and of different objects of the fine arts ; of antiquities, and of natural history. Its management is confided to a librarian-in-chief, who has under his orders two joint-librarians, a sub-librarian, and a house-steward. The office of librarian-in-chief is honorary. He has no emolument, and he derives no advantage but that of having apartments in the house of the museum. The joint-librarians have each 1200 roubles (£55.) salary, and the under-librarian 800 roubles (£36. 13s. 11d.), besides apartments. The library, consisting of 30,818 printed volumes, 731 manuscripts, 636 geographical charts, &c. is divided according to the subjects into sections, and is arranged in each section in alphabetical order. The cabinet of minerals, containing 12,974 specimens, is divided into three classes, according to the Wernerian system—1st. earth and stones ; 2nd. metals ; 3rd. ‘ *combustibles*.’ The collection of medals (1594 pieces) is divided into three parts—1st. Greek and Roman medals, 601 pieces ; 2nd. Oriental coins, 946 pieces ; 3rd. Russian coins, 47 pieces. The annual cost for the

management of this museum is 13,065 roubles (£598. 16s. 3d.) Half of this annual expense is defrayed by government; the remaining half is obtained from the rent of a house belonging to the museum. The librarian-in-chief is Mr. Vostokof; the joint-librarians are Messrs. Jackson and de St. Thomas. The sub-librarian is Mr. Terestchenko. The public are admitted to the museum every day in the week except Sundays and fête-days, from ten to four in the summer, and from ten to three o'clock in winter. The books, both printed and manuscripts, may be read and extracts taken from them. The books and manuscripts of the museum may also be lent out of the establishment to persons who are known to the librarian.

The Imperial Academy of Sciences, another public institution of St. Petersburg, has under its special management,—

1. A library divided into two sections; one for Russian books, the other for works in foreign languages.

2. An observatory; (the great central observatory, the construction of which the emperor has ordered, is also under the direction of the academy).

3. A cabinet of natural philosophy.

4. A chemical laboratory.

5. A workshop for making mathematical and other philosophical instruments.

6. A magnetic observatory.

7. A museum of mineralogy and geology.

8. A botanical museum.

9. A zoological and zootomical museum.

10. A cabinet consecrated to the memory of the Czar Peter.

11. An Asiatic museum.

12. An Egyptian museum.

13. A museum of coins and medals, and of antiquities.

14. An ethnographic museum, and for objects of art.

Each of the two sections of the library is under the direction of a principal librarian, chosen by the president of the academy, either from among the academicians or among men of letters, who are not members of that scientific body. Mr. Sokoloff, perpetual secretary of the Russian academy, is librarian of the department allotted to Russian literature, and Mr. Sjögun, member of the academy of sciences, is librarian of the other section. They have two assistants. The other cabinets and museums are under the care of different members of the academy. The expenses of these various establishments are not fixed. The academy furnishes a very insignificant part, arising out of funds the

produce of its own labours. Sometimes the academy has recourse to the munificence of the emperor.

The purchase of the instruments for the central observatory will cost above 200,000 roubles (£9166. 13s. 4d.), and the annual expense of this establishment is fixed at 47,000 roubles (£2154. 3s. 4d.).

The admission of the public to the different museums is not yet duly regulated, on account of the want of premises suitable for that purpose, and of the insufficient number of persons employed. Individuals engaged in the study of the sciences have free access to all the collections on application to the directors. The valuable collections, and those in which the objects are open and unprotected, are not accessible to the public at large. A detailed account of the collections of the academy up to 1776 is given in the '*St. Petersburg Journal*' of that year. Since 1826 an account has been regularly published in each year in the '*Recueil des Actes des Séances publiques de l'Académie.*'

• DENMARK.

THE Royal Museum for Arts and Antiquities at Copenhagen is under the direction and control of the exchequer chamber, and under the management of a governor and inspector. It contains classical and Egyptian antiquities, northern antiquities and relics of the middle ages, specimens of art, intaglios, gems, &c. The expenses are defrayed out of the royal treasury, and are uncertain. Admission may be obtained every day on previous application being made to the inspector. Tickets cost 2 dollars (4s. 5½d.); but a party of ten may be admitted with one ticket.

The Royal Picture Gallery, under the management of the same governor and inspector, consists of twelve rooms, in which the paintings of the different schools are classed. It is open to the public every Tuesday, Friday, and Sunday. A ticket costs ¼ dollar (6¾d.) Strangers are admitted every day on applying at the inspector's house and paying as above.

The Museum for Northern Antiquities is under a committee of management, and a special director. The antiquities are divided into four departments:—

1. Pagan, which is subdivided into three classes.
 - (A) Before metals were known.
 - (B) When only two metals.
 - (C) When the metals generally were known.
2. Relating to Catholic worship in the north.
3. Chivalric.
4. Foreign antiquities.

There is admission gratis every Thursday from eleven to one o'clock.

The Royal Museum for Natural History is under the management of a governor and directors. It comprises a zoological and a mineralogical collection, and is open every Thursday and Sunday from eleven to two o'clock: the admission is free.

The Royal Cabinet of Coins and Medals is under the management of a governor, director, and inspectors, and is open to the public, gratis, on Monday from eleven to two, and Friday afternoon from five to seven. The director delivers a lecture on each of these occasions, which occupies an hour.

The Royal Cabinet of Engravings contains 90,000 engravings, chiefly of the elder Dutch and German artists, and 1000 drawings. This institution is only in progress, and is not yet open to the public: it is under the management of a governor, committee, and inspector. All the above six institutions have the same governor, His Excellency A. W. v. Hanch, Marshal of the Court. The expenses of none are defined, but they are all defrayed out of the royal treasury.

There are three public libraries in Copenhagen. The largest of these is the king's library, which contains 400,000 volumes and about 20,000 manuscripts; these works are on all branches of knowledge. All respectable householders, or strangers introduced by such, have free access to the reading-room, and may consult whatever books they please. They may also take books home to their houses; but this privilege is, of course, subject to exception in the case of rare or very valuable books. Special application must be made to the governor for permission to borrow manuscripts. The reading-room is open daily from eleven to two o'clock; and books are lent out daily (Wednesdays excepted) from eleven to one o'clock. This library is under the management of a governor (the same as the governor of the museums), who has no salary; of

	Dollars.	£.	s.	d.
A head librarian, who receives	- 800	(88	17	9)
One secretary - - - -	- 900	(100	0	0)
Ditto - - - - -	- 800	(88	17	9)
Ditto - - - - -	- 700	(77	15	8½)
An inspector of the reading-room	700	(77	15	8½)
A book-keeper - - - -	- 350	(38	17	10¼)
A clerk or copier - - -	- 300	(33	6	8)

Four thousand dollars are allowed annually for purchasing books, and 1000 for binding. The general annual expenses are about 10,000 dollars (£1111. 2s. 2½d.), which are paid out of the royal treasury. The library has a right to a gratis

copy of every book published in Denmark. This privilege is likewise allowed to the university library, which contains 110,000 volumes, all collected since 1728, when the original library was destroyed by fire. It also contains 20,000 manuscripts, comprising 1761 ancient Icelandic MSS., 202 Oriental, besides 1228 MSS., some classical and some relating to Danish history, and MS. collations of the classics. Every respectable householder, or stranger introduced and guaranteed by a respectable householder, has the use of the reading-room, and may borrow books from the library. Books are borrowed and returned between the hours of eleven and one, and the reading-room is open between the hours of one and two daily. This library is under the management of a committee receiving no emolument, a head librarian with a salary of 635 dollars (£70. 11s. 0d.), and two under librarians, the one having 450 dollars (£50.), and the other 100 dollars (£11. 2s. 2½d.) per annum.

Two thousand dollars are employed annually in the purchase of books, chiefly foreign. The annual expenses are about 3500 dollars (£388. 17s. 10¼d.): these are paid partly from the general funds of the University, and partly from special legacies in favour of the library.

Clapen's library contains about 35,000 printed volumes, but no manuscripts. The principal subjects are geography, travels, natural history, and agriculture. Books are lent under the same restrictions as in the two preceding libraries. The reading-room is open from eleven to two on Tuesdays, Wednesdays, Thursdays, and Fridays. The salary of the head librarian is 600 dollars (£66. 13s. 4d.); of the under librarian 400 dollars (£44. 8s. 10½d.) One thousand dollars are allowed annually for the purchase of books, besides binding; the whole annual expenses are about 3000 dollars (£333. 6s. 8d.), supplied from the estate of the founder.

The salaries of the librarians in these institutions are so small, as to appear inadequate for their remuneration; but they are in general only accessories, the librarians holding at the same time other lucrative situations.

Besides the public libraries at Copenhagen, there are public libraries in each of the seven dioceses; namely, at Roeskilde, Odensee, Mareboe, Aalborg, Aarhus, Ribe, and Wiborg, and one in Iceland. These are under the control of the bishop and the high bailiff of the respective dioceses.

BELGIUM.

BRUSSELS possesses a museum of arts and manufactures, a museum of pictures, a cabinet of natural history, a cabinet of natural philosophy, and of coins and medals. The first of these establishments belongs to government, and is managed by a

commission of six members, under the direction of the minister of the interior. This museum contains collections of different instruments, and machines applicable to the arts, to agriculture, to manufactures, and to the sciences, physical, chemical, and mathematical. The annual expense, 30,000 francs (£1200.), is defrayed by government. It is open to the public every day from nine to three o'clock. The rest of the museums belong to the city, and are managed by commissioners, under the control and direction of 'La Regence.' The commissioners receive no salary. The annual expenses of the three museums amount to 14,058 francs (£562. 3s. 5d.), and are paid out of the city funds. These institutions are open to the public from ten to four o'clock, on Sunday, Monday, and Tuesday, with the exception of the months of August and September. Foreigners are admitted every day throughout the year, at the hours mentioned, upon showing their passport to the porter.

There are two public libraries at Brussels; the one, composed of printed works, belongs to the city; the other, composed entirely of manuscripts, belongs to the government. The first contains 140,000 volumes, the second 15,000 manuscripts. The city library is open to the public on Monday, Wednesday, Thursday, Friday, and Saturday of each week from ten to two o'clock. The purchase of books costs annually 1150 francs (£46.): the total annual expenses of the establishment are 4800 francs (£192.); but from time to time there are special appropriations for the further purchase of books: the last (1000 francs) was made in 1833.

The government library is open every day in the year from nine to four o'clock. From 6000 (£240.) to 7000 francs (£280.) are expended yearly in the purchase of manuscripts. The total annual expense of the establishment is 10,000 francs (£400.), paid by government. The following towns in Belgium also possess public libraries:—Ghent, Liège, Louvain, Antwerp, Bruges, Mons, Namur, Tournay. The libraries in the first three are under the direction of the universities in those towns. The libraries in the remaining towns are managed by librarians under the superintendence of the municipal authorities.

WIRTEMBERG.

THE capital, Stuttgard, possesses a cabinet of natural history, and a small cabinet of medals, antiquities, and arts. These two establishments, together with the public library and the King's private library, have a director in common, who receives an annual salary of 1,600 florins, (80l.)* The general annual

* The gulden or florin is equal to about one shilling sterling. We have assumed this as the value of the florin here quoted.

expenses of these museums are about 850 florins, (42*l.* 10*s.*), which are paid out of the public treasury. The cabinet of natural history is at all times open to the public on previous application to the inspector. Permission to visit the cabinet of medals, &c. can only be granted when the inspector has leisure to accompany the visitors.

There is one public library at Stuttgard which contains 197,000 volumes, and 1800 manuscripts: the entrance is free to all persons, provided they are accompanied by a servant of the establishment.

On the afternoons of Wednesday and Saturday, persons are allowed to read in the library. Books are lent likewise under certain regulations, to certain individuals. The establishment is under the control of the minister of the interior, and managed by a librarian, receiving 1500 florins annually, (£75), and two sub-librarians receiving, one 1200, the second 1000; making 2200 (£110). The annual expense in books is about 4000 florins (£200). All booksellers in the kingdom are required to furnish a copy of any work published by them. The general annual expenses are about 7000 florins (£350), paid out of the public treasury.

TUSCANY.

FLORENCE possesses a museum, placed under the control of the minister of the interior. It has for its management one director and three professors; an astronomer is likewise attached to the establishment; all of whom receive as salary, 100 francesconi each (£22 10*s.*), and are lodged at the public expense. The museum consists of a cabinet of natural history, another of mineralogy, a third of physic, and an observatory; a botanical garden of inconsiderable extent likewise forms part of the establishment. The annual expenses cannot be well ascertained, since they vary according to the purchases which are made, and the various alterations and improvements which are introduced. The expenses are defrayed out of sums set apart by the direction of the government. The public are admitted to the museum every day, except on fête-days, between the hours of ten and three o'clock, and are likewise permitted to attend the lectures. The museum of antiquities is annexed to the gallery of paintings, and is placed at present under the same director. Those persons only who have received a special permission are permitted to view this museum, which possesses a large collection of Etruscan and Grecian gems, and of gold and silver medals.

A museum of Etruscan antiquities still exists at Cortona; but the most valuable articles were stolen some years ago,

since which time little care has been taken to keep up the establishment. Another more perfect collection of Etruscan remains is kept at Volterra.

There are five public libraries at Florence; first, the collection of books bequeathed to the public by Magliabechi, (by whose name it is distinguished,) and enriched by the subsequent governments of Tuscany. This library is under the direction of a librarian, who receives 240 scudi* (£64 1s. 7d.) per annum salary, and has under his orders a sub-librarian with a salary of 180 scudi (£48 1s. 2d.), an assistant, a clerk, and four guardians (custodi).

2 and 3. The Lawrentian and Marcellian libraries are under the charge of one librarian, at a salary of 396 scudi (£105 14s. 8d.); each of these collections has, besides a sub-librarian, an assistant and a guardian, who receive respectively as salary half the amount of what the librarian has.

4. The Riccardi collection is managed by a librarian and a sub-librarian, the former of whom receives 164 scudi per annum (£43 15s. 9d.).

5. The library of the 'Belle Arti,' containing books taken out of the suppressed convents, is placed under the superintendence of one librarian, at a salary of 348 scudi (£92 18s. 4d.).

Not more than 100 scudi (£26 14s.) are expended annually in the purchase and the binding of books for the Magliabechian collection, and proportionally smaller sums are laid out upon the other libraries: the expenses are very trifling. The public are admitted to the first three libraries every day in the year, except on fête days; and from the 1st of October to the 12th of November the doors are opened at nine, and closed at two o'clock. The Marcellian is open every Monday, Wednesday, and Friday; and the library of the 'Belle Arti' on every Tuesday, Thursday, and Saturday of the year. The loan of books is not allowed, but every facility is given to persons who may be desirous of making notes or extracts from them. There is no very correct catalogue of the books in any of the libraries, except in the 'Belle Arti'; the exact number of volumes cannot therefore be well ascertained. The Magliabechian library is supposed to contain 150,000 printed books, and 11,000 manuscripts; the Lawrentian, 9000 manuscripts; the Marcellian, 5000 volumes; the Riccardi, 26,000 volumes and 9000 manuscripts; and the collection of the 'Belle Arti' 11,000 volumes.

In almost all the chief provincial towns of Tuscany there are

* We suppose the scudo d'oro of $7\frac{1}{2}$ lire is here meant, equal to 63·97 pence English.

public libraries, though in general of no great value, which are placed under the control of the communal magistrates; the librarians are for the most part priests and schoolmasters, who receive a small annual allowance of thirty or forty scudi. The libraries of Pisa and Sienna are, however, exceptions to this general character; each of these establishments possesses about 50,000 volumes, and to each an annual addition of books, to the value of 100 scudi, is made; the librarian of each town receives a salary of 160 scudi.

NAPLES.

The Royal Museum at Naples, besides being devoted to the arts and antiquities, contains a library, and schools of painting, drawing, sculpture, and architecture: all these are under the control of the minister of the interior. There are also four cabinets of natural history at Naples, and a botanical garden belonging to the government; and there are three cabinets of natural history belonging to private individuals, to which the public are admitted.

A director, a comptroller, a secretary, and an architect, are attached to the royal museum; one director to each of the four cabinets of natural history, and one to the botanical garden. The royal museum is divided into the following departments—

1. A collection of statues and of inscriptions.
2. A collection of Etruscan vases, Egyptian monuments, and Herculanean paintings.
3. A collection of small bronzes and ancient glass.
4. A collection of coins, precious objects, terracotta, and objects of the middle ages.
5. A collection of paintings.
6. A library.
7. Schools of painting, drawing, sculpture, and architecture.

The four public cabinets of natural history belong to the University: they comprise mineralogical, zoological, materia medica, and pathological anatomy museums. The private cabinets consist of zoological, geological, and mineralogical museums.

The general annual expenses are, for the royal museum, 100,000 ducats per annum (£17,110):

		Ducats.	£.	s.	d.
Mineralogical	- -	1500	(256	13	0)
Zoological	- -	800	(136	17	7)
Materia Medica	- -	600	(102	13	4)
Pathological Anatomy	-	1300	(222	8	10)
Botanical Garden	-	4200	(718	12	4)

These expenses are defrayed from the Royal Treasury. The

public are admitted every day, except holidays, from eight till two o'clock; there is nothing demanded upon entrance, but a trifle is always expected by the attendants who open the different rooms.

The library attached to the royal museum contains 300,000 printed volumes, and about 6000 manuscripts; 4000 ducats, (£684 8s.) are annually expended in the purchase of foreign works, and two copies of every work printed in the kingdom of Naples are sent to this institution: it is under the management of four librarians.

There are likewise four other public libraries at Naples:—

The Brancacciano, containing 10,000 volumes;

The University - - - 50,000

The Convent of St. Jerome 50,000

The Military Staff - 10,000

The public have free permission to read in all the five libraries, but no books are allowed to be taken away. The royal library and all the others, except the Brancacciano, are open every day, except on fête-days, in the months of May, June, July, August, and September, from seven till two o'clock, and the remaining months from eight till two; they are, however, closed a week at Christmas, the last six days of Carnival, the first day in Lent, from Wednesday in the holy week until Easter Tuesday, and finally, from the 15th of October until the 5th of November.

The Brancacciano is open every day from the 6th of November until the end of May, with the exceptions mentioned above, (Saturdays excluded,) from eight until eleven o'clock, and 'from the twenty-first to the twenty-third Italian hour.' From the 1st of June to the 28th of September it is only open in the afternoon. All these establishments are under the superintendence of the minister of the interior.

There are public libraries in the provincial towns of Foggia and Lucera, and in every diocese there are libraries belonging to the see, to which admission may be obtained by a 'permission.'

FRANKFORT-ON-THE-MAIN.

There are two national museums in this town. The institution of Staedel is exclusively devoted to the fine arts. It was founded by Johann Friedrich Staedel, a merchant, who died in 1816, and bequeathed for this purpose about 1,300,000 florins (£136,500). It is placed under the control of five directors, who, upon the death or resignation of one of their number, elect his successor. These directors have been invested by the founder with unlimited powers to conduct the

affairs of the institution, in conformity with the terms of the bequest. These five directors receive no salary; they appoint an inspector, who receives 1700 florins (£178 10s.) annually, besides an apartment, free of expense: there is likewise a director for the collections, who has a salary of 1000 florins (£105). The pieces of sculpture, paintings, drawings, and sketches, amount to about 10,000; the engravings to about 30,000; and books relating to the fine arts, from 2000 to 3000 volumes. The annual expenses of the establishment amount to 35,000 florins* (£3675), a part of which is applied to the support of the academy connected with this institution. About 15,000 florins (£1575) are annually appropriated to the augmentation of the collections, of which 2000 (£210) are expended on books. The public have free admission to the collections of sculpture and paintings, four times a week, for two hours each time; to the library once a week for two hours.

The Senkenberg museum is so called because it was founded by Johann Christian Von Senkenberg, a physician, in 1769. It contains a museum of natural history for zoology, mineralogy, and botany; a botanical garden and green-house, and an anatomical school. The whole is now under the management of the active members of the Senkenberg Society for natural history, first instituted in 1817. The members are divided into active and honorary; all pay alike eleven florins per annum for the support of the establishment. The number of contributing members amounts to about 300. To the sum raised by them the High Senate adds out of the public treasury 1500 florins, making a total of 4800 florins. Extensive buildings were erected in 1819 and 1828, for containing the scientific collections which are now large and very valuable. The means for raising these buildings were obtained by general contributions from the wealthy inhabitants of the town. The museums are open to the public on two fixed days of the week; the teachers and scholars of the public schools and the members of the society have access to them at all times: there is an extensive library attached to this establishment.

The 'Stadt-Bibliothek,' the public library at Frankfort, contains 50,000 volumes and 500 manuscripts. It is open to the public four days in the week, twice for two hours and twice for one hour; every burgher is entitled to receive books upon giving a receipt for them; strangers can only receive books

* The convention florin is equal to 2s. 1½d. sterling. We have assumed this value, believing it to be correct.

through the recommendation of burghers, and upon depositing a sum of money. All persons, whether native or foreigners, are at liberty to read and study at the library, but not to take the books home. The government of the library is in three members of the Senate, and is intrusted to the care of two librarians, one of whom receives a salary of 600, and the other of 400 florins. About 2565 florins are annually expended in books and binding; the whole expenses amount to 4350 florins per annum. The necessary supply of fuel is furnished gratis from the forests belonging to the town. The expenses are paid out of the public treasury, with the exception of 350 florins, being interest arising from various legacies left to the establishment.

SAXONY.

There is no national museum in Saxony, but the following collections have been made at Dresden:—

1. Picture gallery:—one director and two inspectors; their joint salaries amount to 1200 dollars (£180).

2. Gallery of antiques:—one director, salary 300 dollars (£45).

3. Collection of medals:—one director, salary 300 dollars (£45).

4. Cabinet of natural history:—two inspectors, joint salaries 1300 dollars (£195).

5. Collection of physical and mathematical instruments:—two inspectors, joint salaries 1000 dollars (£150).

6. Historical museum:—one inspector, salary 400 dollars (£60).

7. Collection of copies of antiques in plaster of Paris:—one inspector, salary 300 dollars (£45).

8. Collection of engravings:—one inspector, salary 500 dollars (£75).

The sum of 3000 dollars (£450) is allowed annually by the state for the support of the above collections, which are open to the public twice a week, and may be seen on other days by parties of six persons, each individual paying 1s.

The public library at Dresden contains 300,000 volumes, 2700 manuscripts, and 150,000 pamphlets. The library, together with the above collections, are the entailed property (*Fidei Commissa*) of the crown of Saxony, and can neither be sold nor removed out of the country. They are all under the control of the Minister of the Interior. The library is managed by one librarian, receiving 1000 dollars per annum (£150); one sub-librarian, salary 600 dollars (£90); and two secretaries, whose joint salaries are 700 dollars (£105). The sum

of 2500 dollars (£375) is allowed annually for buying books. The expenses of the establishment are defrayed by the state.

The library at Leipzig, principally intended for the use of the University, contains 110,000 volumes and 2000 manuscripts; it is under the control of the Minister of Worship, and under the management of a librarian at a salary of 600 dollars (£90). The library at Dresden, as well as this at Leipzig, are open to the public every day.

SWITZERLAND.

There is a small museum of natural history at Bern belonging to the town: it is placed under the direction and inspection of a committee, consisting of a president and four members, who give their services gratis. Free admission is granted to the public in summer thrice, and in winter twice a week; it is also open at any other time, at the discretion of the servants in waiting. The annual expenses are about 1500 Swiss francs (£90), of which 400 (£24) is expended in wages for servants.

The public town-library of Bern contains about 35,000 printed volumes and about 1050 manuscripts. It is under the direction of a commission of six members (including the head librarian) and a president. The general annual expenses are for

	S. f.	£
Books	2800	168
Salaries	900	54
Attendance	200	12
Furniture, &c. . . .	700	42

S. f. 4600 £ 276

These are paid by customary annual contributions :

	S. f.
1. From the municipality	2,000
2. Subscription of the Cantonal government, on account of the University	1,600
3. Capital and rent of houses	900
4. Money taken from visitors	100

S. f. 4600

Every inhabitant of the city, whether citizen or not, can buy the right of making use of the library for 10 Swiss francs (about 12s. 2d.), without any further yearly payment. Ecclesiastics pay only 6 francs.

Accounts of the literary institutions of France, Prussia, &c. have not yet been laid before Parliament.

EDUCATION.

EDUCATION may be defined, as that series of means by which the human understanding is improved, and the dispositions of the heart are formed and called forth, between infancy and the time when we consider ourselves qualified to take an active part in life. The common acceptance of the term *education*, however, has various meanings: with the wealthy classes it is understood, that those only are educated who have studied Greek and Latin, and have some acquaintance with the French and Italian languages, &c. The merchant and tradesman look for education in penmanship, and a thorough knowledge of the ordinary rules of calculation.

Since the establishment of our national schools, the poorer classes have been led to suppose that all education is comprised in the qualifications of reading and writing; but those who have led them into this delusion must be more commended for their zeal and good intentions than for their judgment.

The end of education we must suppose to be what the word literally implies—to draw out; that is, to draw out the qualities and powers of the mind; and it cannot but be deemed of the highest importance to ascertain what system of training children is best calculated for the attainment of the highest state of perfection of which our nature may be capable.

Among many of the ancient nations, the education of youth was made an important part of the state polity. The Persians, the Cretans, and the Lacedæmonians, and no doubt others also, subjected all their children to a regular discipline which was in harmony with the kind of social life into which the children were destined to enter at the age of manhood. The Persians did not teach literary accomplishments, but justice, temperance, and modesty; and to shoot with the bow, and to throw the javelin. The moral virtues and the bodily exercises were what the Persians laboured to teach their children; those who may wish to understand their system will do well to read the first part of Xenophon's *Cyropædia**. Modesty, docility, and self-control, are certainly admirable qualities in youth, the drawing out and cherishing of which ought to form, from childhood to manhood, a principal object in the education of a community. Locke says, 'the objects of education are: first, to preserve and strengthen the bodily constitution; secondly, to inform the understanding with useful knowledge, and to cherish good dispositions in the heart.'

To whatever class we turn in England, we rarely observe

* Whether Xenophon's view of Persian education is an historical truth, or merely his own theory of education, does not affect the value of his remarks.

that these considerations are treated as important questions, in the ordinary plans of education.

The acquirements that are unattainable without the expenditure of much time and money, are those generally selected by the upper classes to establish an exclusiveness in society. In this country all classes below the highest are striving to elevate themselves into the class above them; and one of the modes of effecting this, is to adopt a kind of education like that adopted by the upper classes. This education mainly consists of Greek and Latin, often badly taught, instead of those branches of moral and physical science which would have a more practical bearing on life, would elevate the character, and might be attained at one-half the expense of a so-called classical education. It is painfully distressing to one who has opportunities of mixing in tradesmen's society in this metropolis, to hear parents boasting of their sons' progress in Greek and Latin; how much time they have devoted to these studies, and what a sum of money has been paid for their tuition.

If we consider the immense waste of mental labour, which is in a measure public property, there can be no real philanthropist who will not use his best efforts to counteract such fallacious notions and to discourage such a pernicious practice, on the part of parents, as paying large sums of money to have their sons' best energies and most valuable days consumed in learning to construe a little Latin, and to master the inflections of a Greek verb. There are many professions in which a knowledge of Greek and Latin is useful and necessary; but as the whole of society cannot follow these professions, is it not a foolish act for a father, without having the slightest intention or even the opportunity of affording his son the means of adopting one of these professions, to educate him in a manner which totally disqualifies him for any other? We may say, totally disqualifies—for if a youth attains any proficiency in classical knowledge, and acquires a taste for it, he will be more unfit for business, because he imagines that he has got something by which he can raise himself, in society above his father. If, however, the youth (which is the more probable result) does, as ninety-nine out of every hundred do who attempt a classical education, spend seven or eight years over the mere rules of the Latin and Greek languages, without being able in the end to construe an easy passage without a dictionary, he returns home at an age when he ought to be prepared to enter on active life, stultified instead of improved for all the money expended upon him.

It is a misfortune that every attempt made to prove the inutility of classical knowledge, except in particular cases, is

met as if it were a direct attack upon our church establishment, our two universities, and all our institutions for learning. We shall not, however, apprehend any such imputation, when we state that the teaching of the dead languages has, in common life, done more to demoralize a large body of the community than any other single defect or error in our education. It has diverted the minds of a large number of young men, without any means for living independently of business, from regular pursuits; or rather, it has disqualified them for following them. Our London pot-houses and other similar places of resort are crowded with young men of this stamp, who may be found after midnight spouting their Latin verses, to obtain that credit for respectability which their pocket and appearance deny them.

This then appears to us one of the great errors committed in the education of those of the middle classes who are intended for business and active life: they waste many years on attempting to learn some Latin and Greek, one or both, which are taught so badly, that the small amount of knowledge acquired is not compensated by any valuable habits of mind formed during this tedious discipline. They neglect the study of the physical sciences and of ethics, both of which may be made to bear directly and profitably on some branch of their business or occupation, and on the general conduct of life.

Another great error is the commencement of education too early, and the conducting it throughout too much upon generals: but the grand error of many reformers in education is, a total reliance upon the power of the memory, and on the effect which moral and religious lessons, wrapped up in tales, will have upon children in after-life. To these errors we may add one still greater,—that of using every exertion to stimulate the powers of the mind, in total ignorance of its capacity, or connexion with the physical conditions of the human frame.

‘No custom,’ Tissot remarks, ‘is more improper and cruel than that of some parents who exact of their children much intellectual labour and great progress in study. It is the tomb of their talents and health.’ It is also the opinion of Hufeland, that by too early study the nervous system acquires a preponderance over all others, which it preserves for the remainder of life; producing innumerable nervous complaints, melancholy, hypochondria, &c. The labour of the mind to which some parents subject their children, not only too soon, but in an entirely wrong direction, is often the cause of their bad health, and occasions nearly all those effects which dis-

tinguish children for precocity of the intellectual faculties: these children, as is well known, generally die early. It is for this reason that we seldom behold a *perfect man*; that is, one who exhibits the physical, mental, and moral faculties, all in a healthy state.

In an early age, before the body has acquired its proper development, the brain its perfect consolidation, or the organs generally are confirmed in their healthy existence, premature exercise of the intellectual faculties is the cause of many chronic disorders. By the undue excitement of the brain, its organic functions are augmented, the action of the organs of nutrition, secretion, &c. are enfeebled; the muscular system becomes morbidly irritable; and the brain subject to a variety of injurious affections. The tendency of excessive mental excitement to produce insanity is well established; yet these instances are lost upon us in our treatment of children. Great men owe not their mental elevation to early hot-house culture. Sir Isaac Newton, according to his own statement, was 'inattentive to study, and ranked very low in the school till the age of twelve.' Napoleon, when a child, is described as 'having *good health*, and in other respects like other boys;' and a similar observation may be made of many or most others who have been most distinguished for mental powers.

The employment for which youth are designed in after-life should be our guide in regulating their studies; regard being especially had to the establishing of a healthy constitution, which is inseparable from success and happiness in life. Let no parents deceive themselves when they discover in their children unusual powers of memory or of reason; they should look upon such symptoms as the *prognosis* of diseased action, —the indications and precursors of a premature decay, and of early death: in these cases every effort should be made to check rather than to encourage precocity of mind. From childhood, at least to adolescence, the physical expansion and free development of the frame should precede and take the lead of the cultivation of the mental powers: a sound mind in a healthy body, when a person is arrived at manhood, is of much higher importance than a dazzling show of superior talents for a few years of an unhealthy existence. It is a law in nature that things of slow growth are the most enduring; and as it is with the body, so it is with the mind; a natural progressive growth of both is our only chance for strength in manhood and a useful old age.

The Greeks possessed a correct notion of the importance of giving the human frame the fullest and fairest chance of

development; hence their gymnastic exercises, their Olympic games, and the prizes awarded for the encouragement of manly feats. Florists, in order to obtain an early efflorescence of plants by forcing them, enclose their roots in small pots; but this, as the unwary purchasers in the end discover, is done at the expense of the future fructification of the plant. In the human frame, if the brain and nervous system preponderate, a preternatural action is superinduced, which exhibiting itself in children in a certain forwardness and aptitude beyond their age, is erroneously mistaken by most parents for genius.

How common it is to hear parents lamenting the death of a child who was remarkable for early development or precocity of understanding, of which they appear to speak with pride, treasuring up in the remembrance all the child's sayings and actions, perhaps adding, for the hundredth time, "Ah! not only we, but the world sustained a loss in that boy." It may appear cruel, but those will be right, in nine cases out of ten, who answer such persons by assuring them, that had their favourite child lived, he would in all probability have been an idiot.

The degree of exertion which the brain will conveniently undergo varies in individuals as much as their muscular capabilities. Let us suppose that, with a view of training and exercising the animal powers, it were laid down as a rule that boys should be subjected, from the age of six to fourteen, to the labour of carrying every day as many pounds weight as many miles as they were years old. It cannot be doubted but many would go through such toil, and reach manhood with an increase of strength; but what would be the fate of those whose strength, at some time in their boyhood, would not enable them to lift the weight, much less to carry it all the distance, or who could not walk the distance if they could carry the burden? The physical powers of the majority would sink under the discipline, while others might struggle through the period of probation, disgusted with the drudgery to which they had been subjected. Now this is precisely what we do at many of our schools: the discipline, and the duties to be performed, are the same for all boys who enter; some of the pupils surmount the evils of the system (not in consequence, but in spite of it); become conspicuous in after-life, while ninety-nine out of every hundred are stultified and thrown upon the world useless members of that community in which they are to live. The upholders of this system, which sacrifices the many to the interest of a few, take the prizes, as Mr. Bish was wont to do those drawn from the lottery wheel, and parade them before

the eye of the public ; the blanks they pass over unnoticed, and the sufferers are unpitied.

Before we speak more particularly of the education of the poor, we must say something on the subject of nursery, or preparatory, education as now generally conducted in respectable society.

First. We object to the use that is made (or rather to the books themselves) of nearly all the modern juvenile publications. This is an opinion which may in these book-days startle our readers ; but as these books are made, with no reference to a sound system of education, most of them only tend to perpetuate errors, and become, when they get firmly rooted in families and schools, the great obstacle to the introduction of new and correct principles.

Secondly. The memory of children is too early taxed ;— and, Thirdly : we press moral and religious principles upon the young mind, relying upon the efficacy of precept at a time when children are only affected by sensible objects ; and we neglect discipline and example, the only means of instruction when children are of an age incapable of reasoning upon the moral question of right and wrong.

Children, when about to be taught to read, may have easy, and to them (if we can make them so) interesting, lessons put into their hands ; and of these the best specimens are those found in the old spelling-books, descriptive of the qualities of the horse, cow, &c. As soon however as a child has acquired a tolerable facility in reading, every work of mere amusement and of a light nature should, as far as may be found practicable, be removed out of his sight : all his reading should consist of descriptions of sensible objects, of his wants, and of the means of supplying them. None of this matter should be wrapped up in tales of fiction.

Just in proportion as novels and romances are pernicious in diverting those arrived to that time of life termed adolescence from useful and regular pursuits, so are all works intitled amusing injurious to children after they have been taught to read.

Up to the age of six years, every child has enough employment for his mental faculties in contemplating the objects of nature that surround him, and familiarising himself with their nomenclature ; about which age if he has acquired a knowledge of our alphabetical signs, and made some progress in words of one or two syllables, he has done quite enough. His education, in the common acceptance of the term, now commences ; but his instruction should for the present be more

oral than from books. The divinity he should be taught to worship is truth, and any deviation from strict veracity should be made to bring with it that kind of inconvenience which in actual life is the consequence of lying: doubt him when he speaks the truth, and disbelieve his sincerity even when he expresses his wants, until he is sensible of the folly of uttering falsehoods.

Rousseau's ideas (*Emile, ou de l'Education*) on the treatment of children are very clearly stated; he says, 'Seek not to impress them with ideas of duty or obligation. Till children reach the years of discretion, they are incapable of any notions of the distinctions of morality. Avoid therefore even the use of the terms by which they are expressed in their hearing. While they continue to be affected only by sensible objects, seem not to excite their ideas beyond the sphere of sensation: require not of them an implicit obedience to your will—let all their reasonable desires be instantly gratified—let their unreasonable desires be opposed only by their natural inability to gratify them, or the inconveniences attending the gratification. Beware of letting them establish their authority over you by means of the forms of politeness. A child will scarcely take the trouble to address you with, *If you please*, unless he has been made to regard these as a set of magic syllables, by the use of which he may subject every person to his will. His *If you please* then means, *I please*; *pray*, with him stands for *do*. Though you put into his mouth the words of humility, his tone and air are those of authority that *will* be obeyed. * * * * But although you seek not to regulate his conduct by notions of duty, yet let him feel the yoke of authority. * * * * He may readily conceive that for one set of actions you will punish him, and by another he will obtain your approbation; but farther than this, his ideas of right and wrong, of virtue and vice, cannot yet be carried."

Such are the opinions of this writer, who, on the subject of child's books, expresses himself with his usual good sense:

'Child's books teach them only to talk about what they do not understand,—as few books as possible,—yet if I can find a book, in which all the natural wants of man are displayed in a manner suitable to the understanding of a child, and in which the means of satisfying those wants are gradually displayed with the same ease and simplicity, such a book will be worth the attention. Such a book I have found,—it is "Robinson Crusoe."'

A story-book in a child's hands is nothing but a story-book, whatever religious or moral instruction it may contain; it is the moving action, the scenes and the *denouement*, not the *morale*, that interest, if it interests at all.

Every book of this character, however it may be worded (and many of them contain much nonsense put into the mouths of mammas and papas, besides assisting in propagating serious popular errors), operates upon the mind, as moving scenes of

strife and contention do, either in actual life or upon the stage. It is the actions that arrest their attention, not the sentiments—it is all harlequin, clown, and pantaloons with them. Can we succeed in impressing a moral upon the minds of children while witnessing the performance of a pantomime? Will they not answer you with a loud laugh at the clown's antics? If a son behaves ill, and the parent deems it proper to chide and make him sensible of his misconduct, will he, in order to render his reproof more effectual, dramatize it, or dress it up in a pleasing story?

The juvenile librarian tells us he has works adapted to, and brought within the capacity of, children of all ages; and adds, that it requires a clever head to write a child's book. The probable truth is, that those who write them were, during their school days of probation, accommodated with books adapted to their own capacity, and never being put to any mental exertion, remain children still—as a child they think, and as a child they write. So long as children are permitted to feed from the board of the pastrycook, so long will their stomachs reject more substantial and wholesome food; while the minds of children are allowed to find amusement in what are called pretty story-books, it is not very probable they will learn to dig and search for knowledge,—the only mode of rendering it of any value when obtained. It is not what others do for us, but what we do ourselves that must improve the understanding. The talent of educational book-making would be best displayed in arranging the matter to be taught, so as to keep a little in advance of the learner; encouraging him, as the nursery-maid does when teaching the child to walk, holding out the finger a little distance from it, as an inducement for it to make an effort of its own. In our attempt to stoop down to the level of children, we often go below them.

It behoves the parent who is really desirous of making his son wise as well as learned, to reflect seriously upon how much of nature's works the industry of man has disclosed, and how much more there is to unveil—how much to engage us, and how short a period is allowed to man for him to leave any traces behind of having once existed and occupied a place in this world. Those who are impressed with a strong feeling of benevolence for mankind, will strive to make each succeeding generation rather wise than learned, and to aid in the advancement of knowledge by promoting the investigation of nature. One part of the study of nature is the investigation of our moral and intellectual powers; and the practical application of our discoveries in this branch will be the diminution of all moral evil, or, in other words, the increase of general hap-

piness. To effect these objects, not a particle of mind brought into the world should be wasted and dissipated upon trifles; it is our first duty to collect all the great facts regarding the phenomena of nature, and to lay them, as early as the powers of reason dawn, in a condensed form before each succeeding generation: saying, 'These are the works of your ancestors; make yourself acquainted with them, and before you have run your race add some new fact to the catalogue for the benefit of your posterity.' If parents would but consider how much tough reading and study must be got through only to understand how much has already been done for us, they would see the necessity of first strengthening the body of their children, and then informing, not trifling with, the mind. Every one to whom the charge of a human being is given has a piece of physical and mental machinery placed in his hands—a part of the great world's machine—man, the propelling power of which is mind; we know not to what great ultimate end the labours of man here upon earth will lead, but it is our duty to teach each component part of the great machine how to do its proper work.

It has been well observed, that a certain inarticulate self-consciousness dwells dimly in us, which only our works can render articulate and clearly discernible. Our works are the mirror wherein the mind first sees its form: hence, too, the folly of that impossible precept,—*Know thyself*, till it be translated into this partially possible one,—*Know what thou canst work at*.

But many good people who busy themselves so much about the education of children, are never without an aphorism to fire off at their antagonists; and will have it, that before a child knows the nature of its own existence, and the wants connected therewith, it should be instructed in the principles of religion and morality. Reasoning with such benevolent persons is useless—in them the mischiefs of the system have done their work—namely, separated the heart from the head: they are strong in good intention, but feeble as children in their choice of means and the adaptation of them to a well-defined object.

They tell us a moral is disguised in all the children's books which it is intended should steal slyly into the head or the heart of those who read them. This mode of passing sterling coin reminds one of the man who possessed a real guinea that once had been rejected as a counterfeit; fearing that he should have it left upon his hands, he placed it between two half-pennies and paid it away for the value of one of them. Thus it is with the newly-discovered modes of conveying knowledge. The sterling coin is disguised and dressed up in masquerade, or

covered over and buried among a bushel of leaden dumps for children to play with, who, ever anxious to commence their amusing games, seize each a handful and begin pitching at the mark, without troubling themselves, or even dreaming that a piece of the precious metal lies buried in the heap. Human errors, it is said, walk in a circle, and re-appear at intervals. It is to be hoped that we have arrived at the climax of book-making, and that the art (such as it is) at least of making those for children will from this hour decline;—better that we should wholly return to oral tuition, than have our few grains of knowledge smothered in a chaotic mass of unintelligible type, from which no activity or probable discrimination of youth can ever redeem them.

A taste for reading amusing tales when once engendered, especially in our early days, continues through life, and supersedes a desire for more substantial matter;—the imagination gradually becomes excited before truths enough are harvested for the mind to feed upon; and thus is laid the foundation of unsteadiness of character, a sure forerunner of immorality, which, be it borne in mind, it is the professed object of the writers of tales to counteract.

Even a man, whose understanding has been strengthened by a sound discipline, feels the effect of this species of reading: if we take up a well-constructed story, we are entrapped, and cannot lay it down until we have finished it, although it be forgotten as soon as read. We never refer to it again either for a moral or a sentiment. A story once told, and its *denouement* known, who will read it a second time? The interest is gone; there is nothing to refer to; there is no general truth; nothing applicable to any other combination of circumstances. It leaves behind it a vague unsatisfied feeling, the immediate tendency of which is to unfit us for any serious business. Most tales of fiction lead young people to view all human affairs as running in the wild course of a chance tide, and tend to beget a reliance more upon the event of circumstances turning up in their favour as they advance in life, than a dependence upon their own steady application to one pursuit.

The notion, too, that general early reading is calculated to improve the intellectual faculties is founded on a fallacy; it makes flippant tongues, with shallow understandings: it is not the quantity of reading got through, but the quantity of matter digested, that strengthens the mind and forms the judgment. It is for this reason that many slow studiers are found in the end to make the soundest scholars. Much of the usual kind of reading, as Bishop Butler remarks, is the idlest of all occupations.

But supposing that much reading, and early reading, does stimulate and develop the mind, it is still very doubtful whether it is advisable to let in upon the intellect too strong a light at one time. There is a twilight state of mind which we must have respect to, if we mean successfully to prepare the brain for the reception of real knowledge, which alone leads to wisdom. As the eye is enabled to encounter the piercing light of the mid-day sun, by the temperance and mildness of the morning rays, and his gradual approach to his meridian splendour, so should we treat the human understanding. If the organs of vision were subjected in our early days to the influence of a multiplicity of lights kept flitting before them, they would be so much injured and impaired, as to be, when most needed in manhood, incapable of enduring the brightness of day. If we enquire of the oculist the cause of the eye's debility, he will reply, 'Preternatural excitement of the organs, which has resolved itself into a chronic sub-irritative disease;' and he will further tell us, that as regards the usefulness of the eyes to the adult, of the two evils, it would have been better that during infancy he should have been kept in utter darkness. The German youth, Hauser, who, it is presumed, was confined from his infancy for an experiment upon the human character, we are led to believe was kept in darkness, yet when brought into the world he had the perfect use of his eyes—and moreover, very rapidly under all the circumstances found the use of his intellectual powers.

• The eye, the brain, and the heart, have each their peculiar species of sensibility; in themselves, as Sir Charles Bell has observed, insensible. Speaking of the brain, he says, 'as insensible as the leather of our shoe.' But still the brain requires more delicate treatment than any other organ in the animal economy; and yet it is the least considered by those who labour in the field of tuition, or by the majority of parents, who look for other tests of qualification in tutors than a knowledge of the animal economy, and of the modes of training which are in harmony with it. The most potent influence upon the brain is that derived from the *power and operation of habit*, generated by the law of suggestion; if therefore the eye of the mind (if we may be allowed so to express ourselves in carrying out the simile) be trained to glance only upon the subjects brought before it, and pass on rapidly from one to the other, it will, like the organs of vision, become preternaturally excited, or unsteady and fitful, and but little disposed ever afterwards to penetrate beyond the surface of any subject. The popular impression is, that our numerous

school-publications have lessened the labours of youth in their efforts to attain knowledge, and have smoothed the rugged and thorny paths of study. The improvements on the roads, &c. accelerate our speed in travelling; but few that journey on our *Alert* coaches understand the topography of the road and country through which they pass so well as the pedestrian. The road, indeed, of what is falsely so termed education, is made so smooth and slippery, that most youths slide from one end to the other of it without having an opportunity of registering down in the memory the situation of a tree or a mile-stone.

In point of sound and real knowledge we are considerably behind our forefathers; that is to say, the educated class of our predecessors, excepting only in the physical sciences and their applications. The more general diffusion of light books among the lower classes, and the acquirements of reading and writing by almost every individual in the country, have hitherto in no way augmented our stock of knowledge; there has been a diffusion of commonplace popular truths among the mass of the people, which has created in many the opinion that they possess sound knowledge. As they can now read, they take up the preposterous notion that they are or can be, whenever they please, both learned and wise.

Most of our respectable private seminaries, where high terms are asked for tuition, are conducted upon showy, artificial, and superficial principles. From the temper of society, and the general want of knowledge that pervades the mass of parents on the subject of education, perhaps the proprietors of schools for both sexes are in a measure constrained to adopt a deceptive system of conducting their establishments, instead of pursuing a more decided and straight-forward course. They must all profess to teach all kinds of knowledge, and put into the hands of their pupils books of some kind to lead parents to believe that their children are making progress in a multiplicity of studies; although many teachers are well aware that their pupils cannot possibly attain any useful or practical acquaintance with the subjects of which these books treat.

To remedy this serious national evil, it would not only be necessary that a correct system of education should be laid down by the State for each class, adapted to their means of paying for it, but that the teachers should be licensed according to their qualifications for teaching. This measure would give an intelligent and honest teacher a position of independence with respect to ignorant interference on the part of parents. Now, the schoolmaster who possesses tact to mislead his customers is the most likely man to succeed in his profession.

A short time since, hearing a celebrated teacher of music exclaim 'Bah!' as a mother complimented him, while her daughter was playing a simple air on the piano-forte, for the progress she had made under his tuition, we took the opportunity of asking him what he meant. His reply was, 'I am sick of teaching the children belonging to the class of ignorance; they pay me, it is true, but if I were to commence properly with my pupils, and instruct them in the grammar of music, instead of teaching them in the beginning how to play mechanically some well-known tunes, I should be deemed a cheat, who was taking the money out of their pockets without giving the pupils any useful instruction in return for it.'

As relates to female education in this country, there are masters to teach every art and science who attend such establishments as can afford to pay them; but if they do not possess the tact to render what they have to teach light and easy, or if they attempt to impose any fatiguing duty, with the view of making their pupils proficient, they are soon informed that the class in their branch of study is broken up, and their services are no longer required.

The most fashionable *coiffeuse* in Paris does not labour more to change the costume of the exterior of the head, than English governesses do to find novelty to amuse the mind during the time the pupils are under their charge. Anything new in the art of teaching is now readily adopted in a ladies' school, for fear it should get abroad that the rival seminary has had the priority in acquiring a knowledge of it. The inventions which receive the warmest patronage in such school are those which are the easiest understood, and the most showy when carried into practice: the usefulness of the studies, or the training of the mind to habits of steadiness and to the exercise of reason, are in these modern days of education objects of very little importance.

The science of modern education might be described in one sentence:— 'To supersede, on the part of the pupil, any necessity for reflection.' Know thyself—which is to take a view of all human nature, by reflecting on the mental operations within us—is no longer thought a right mode of study; we are now told that, to become wise, we need not reflect, but read, remembering and believing what we read.

Now were it possible, and, as boy and man, one individual were to read all the written and printed works in the world, he would only be the greater fool, without the light within. It is with man's mind—as it was with nature: the beginning of creation is—light. Till the eye of vision be turned in upon his own ideas, and inferences are drawn out of the deep recesses

of his own thought, the whole of man's members are in bonds: there is no conviction of truth to be derived from any other source, and an ethical question may reasonably be propounded, whether man is entitled to any credit for his imitative conduct (*habit*) which is not the result of reflection. 'But indeed conviction, were it never so excellent, is worthless till it convert itself into conduct. . . . *Do the duty which lies nearest thee*, which thou knowest to be a duty! The second duty will already have become clearer.' The duty here meant, is that which is first prompted by the conviction that we have a duty to perform.

How admirably, in the following passage, is our reliance upon the ideas of others censured:—

'The situation that hath not its duty, its ideal, was never yet occupied by man. Yes, here, in this poor, miserable, hampered, despicable actual [being], wherein thou even now standest, here [within thyself] or nowhere is thy ideal—work it out therefrom; and working, believe, live, be free. Fool! the ideal is in thyself; the impediment, too, is in thyself; thy condition is but the stuff thou art but to shape that same ideal out of; what matters whether such stuff be of this sort or of that, so the form thou give it be heroic, be poetic? O thou that pinest in the imprisonment of the actual [life] and criest bitterly to the gods for a kingdom to rule and create, know this of a truth, the thing thou seekest is already with thee, "here or nowhere" couldst thou only see.'

Truly, if man sees not man through himself, he sees him not at all; the things sought, and the things to be overcome, are both within us—knowledge and passions. Man is a world within the world, moving in a boundless orbit of mind, whose great object is—the annihilation of moral evil; the accomplishment of which is retarded by shutting up in darkness much of the human faculty under modern tuition in early life; or, which is the same thing, teaching it to depend wholly upon others for thought, and diverting it from its home, to make a fugitive chase after the history of the fooleries and vanities of past ages.

On the ideas of reflection, and their coming late in children, Locke has this passage:—

'And hence we see the reason why 'tis pretty late before most children get *ideas* of the operations of their own minds; and some have not very clear or perfect *ideas* of the greatest part of them all their lives. Because, though they pass them continually, yet, like floating visions, they make not deep impressions enough to leave in the mind clear, distinct, lasting ideas, till the understanding turns inwards upon self, *reflects* on its own *operations*, and makes them the object of its own contemplation. Children, when they first come into it, are surrounded with a world of new things, which, by

a constant solicitation of their senses, draw the mind constantly to them, forward to take notice of new, and apt to be delighted with the variety of changing objects. Thus the first years are usually employed and diverted in looking abroad. Men's business in them is to acquaint themselves with what is to be found without; and so growing up in a constant attention to outward sensations, they seldom make any considerable reflection on what passes within them till they come to be of riper years; and some few ever at all.'—(*On the Understanding*, sect. viii.)

Memory, in its definition, is said to be passive, when we refer to simple remembrance; and active, when we make an effort to recollect, and pass in review by-gone events and scenes. Memory not only differs at different ages, but in different persons at all ages: the young soon learn and soon forget; and it is also remarked that an extremely retentive memory is seldom accompanied with acute perception and sound judgment.

Those who imagine that great talents are always associated with a retentive memory fall into a palpable error. On this subject Rousseau (*Emile*) says:—'However quick and tenacious the memories of children may seem, they can derive little advantage from the exertion of memory till such times as the judgment begins to act. The knowledge of words is not science; make the pupil acquainted with things, and he will never fail to acquire words; be careful to place before him those scenes and objects, the images of which it may be useful for him to have impressed on his memory; but by no other means seek to improve the faculty.'

'Sounds which address the ear are lost, and die
In one short hour; but that which strikes the eye
Lives long upon the mind; the faithful sight
Engraves the knowledge with a beam of light.'

The true sources of mind are observation and reflection, both of which must be exercised to acquire real knowledge. Those who wish to appear wise on the basis of ignorance honour the memory; but from such a source they will never possess a patent beyond the possibility of mistake.

A retentive memory is a very convenient faculty, especially to the man of business; but the quality of the judgment is of more importance to every man, and it will generally be found that the man whose advice is most esteemed and sought after has occupied his time in actual observation, and in comparing and reflecting upon facts, rather than in burdening his memory with the ideas of others. As respects the mind, its adaptation to profit from experience appears to be one of its most demonstrable qualities. Of modes of being, such as enjoying, disliking, suffering, desiring we are quite in

the dark ; we know nothing as to the connexion between the impressions made on our systems, and the ideas arising in our minds ; and also between the volitions of our minds, and the consequent actions of our bodily organs. We cannot explain the connection of sensation and perception, far less all the phenomena of memory. Some ideas force themselves upon us in spite of our efforts to get rid of them ; others, which we have resolved to bear about us, will refuse their fellowship, even at periods when we most require their aid. In education the great object then should be to excite the pupil to inquire and compare ; this is of more importance than burdening the memory with artificial rules. It is, however, thought by the generality of parents that storing the mind, as they term it, with rules, is the road to wisdom : but parents should be more anxious to impress their children with habits, than to burden them with rules of conduct. They even think that opinions may be radically implanted by the aid of memory, through the associations. But all persons, who have studied the nature of the human mind, object to early preceptive religious and moral instruction, otherwise than by example.

The people who are for early religious and moral instruction talk much of the associations of ideas in after-life from habit ; but Doctor Priestley asks, ‘What are the ideas or images likely to be associated by children with doctrine and duties of religion, if we call them to listen to the one and perform the other at too early a period ? Will they be such as may assist the influence of religion on their sentiments and conduct in the future part of their life ? Observe the world ; are those who in infancy have been most rigidly compelled to get their catechism by rote, either the most pious or the best-informed in religious matters ?’

Those subjects that are rendered troublesome, and that annoy children, before they have reason enough to understand and decompose a sentence, are ever such as the mind takes a prejudice against ; and most frequently the pupil imbibes a hatred of those who are injudicious enough to undertake the irksome and ungracious task of teaching. What man or boy ever liked the man who first taught him the Latin grammar ?

With respect to the diffusion of a belief in Christianity, as influenced by the very early inculcation of religious dogmas, we hold the following opinions : If we were to collect the numbers of free-thinkers and libertines, and ask for their mode of early culture, the majority would be found to have had what is denominated the *benefit* of a religious education ; while of those who, as adults, support the cause of religion, very few

would be found who had received in their early days any *peculiar* care respecting their moral or religious sentiments. Such at least is the opinion of one who has conversed with mankind as much as most men of his years, and who yields to none in zeal for promoting the happiness of his species.

NATIONAL AND PARISH SCHOOL EDUCATION.

THE early friends of general education were the seceders from the orthodox mother-church; probably they had in view the ultimate increase of their own sect, by instilling into the rising generation their own principles and religious tenets. Be this as it may, the church took the alarm, and seeing that there was some danger in remaining passive, the clergy belonging to the establishment, almost simultaneously, actively promoted the cause of education throughout the country. It is, however, now very manifest, that all parties have failed in their objects, namely, the promoting the cause of religion, and the real education and moral improvement of the lower orders,—a failure which has been occasioned by the means having been mistaken for the end. Mental improvement and knowledge of all kinds, it must be admitted, are in a peculiar way promoted by reading and writing; but then, reading and writing are not education. Vegetation would cease were the earth to be deprived of light and heat; but light and heat are not in themselves vegetation. The sun generates noxious weeds as well as useful grains, but the industry of man counteracts this evil by the cultivation of the ground, and curbs the tendency in the vegetable kingdom to run to waste.

As in the vegetable kingdom, so it is in the world of books; the weeds spring up and flourish more rapidly than the good seed. Where are the husbandmen to counteract this evil in the moral soil of the poor man's family? We cannot find them in the national schools; the schoolmaster with his reading and writing there promotes the growth of the weeds: he neglects to cultivate the ground; in short, he does not educate. He leaves that task to the publishers of cheap literature, who set the press at work for the purpose of receiving the pupils at his hands when prepared with their knowledge of reading. Books are said to be the written message which man delivers to man, through a long series of ages; the articulate communications which the past has with the present, the distant with what is here. But, how much of this written communication is beneficial intelligence, and how much there is which ought never to be received by the uneducated or uninformed, is a question of no small importance; and equally so is it, how we shall prepare the mind to receive, and subse-

quently direct it to find, the valuable written intelligence ; and at the same time give it strength of judgment to reject that which is mischievous.

The knowledge of reading and writing is no more education than feet are walking, or eyes seeing ; they are the organs by which these acts are performed. If we turn out hungry boys, unskilled in simples, into the woods to seek their food, where for every edible plant there grows a hundred of a poisonous nature, who would express surprise at their falling a sacrifice to their ignorance ? If we substitute the mental appetite for that of the stomach, such is the condition of the national-school children when they leave off what is termed their education. Still the nation proudly boasts that she gives her children instruction.

‘ Knowledge she gives, enough to make them know
How abject is their state, how deep their woe ;
The worth of freedom strongly she explains,
While she bows down, and loads their neck with chains.
Faith, too, she plants, for her own ends imprest,
To make them bear the worst, and hope the best ;
And, while she teaches on vile int’rest’s plan,
As laws of God, the wild decrees of man,
Like Pharisees, of whom the Scriptures tell,
She makes them ten times more the sons of hell.’

It is incontrovertible that the children of the poor derive no moral instruction (strictly so understood), and no mental training that exercises their reasoning powers, from the national-schools. The system is tiresomely iterative and monotonous : the mind, when it is sequacious—wax to receive and marble to retain—is wholly neglected ; it goes into the school ductile, and capable of being moulded, but comes out stupified and hardened, in a condition to receive only the worst impressions. The evils of congregating a large number of the children of the lower classes are manifold, but unavoidable ; we have, therefore, a right to look for some positive advantages as a set off against them. A precocious idea of a demoralizing and mischievous tendency, a dishonest principle, or a dubious word viciously applied, may often, when passing current in a national-school, be traced to the introduction of one child having immoral parents. If we reflect upon the evils of the indiscriminate association of hundreds of children, and the daily communication which takes place without, from their knowledge of each other within the walls of the places where they assemble, it is evident that they should have real substantive tuition and not a mere show of tuition ; that is to say, if it be really meant they should be morally and intellectually improved.

The children of the parish schools are neglected at the most important crisis of their existence,—at that time when assistance is most needed. Then it is that they may be seen, for want of proper instruction and well-directed mental employment, greedily feeding upon the productions of a low and obscene press. The inculcations of religion and morality, which were thrown away upon them some few years back, are now wanted; the little human machines with which the schoolmaster was so busy, at a period of immaturity, in teaching them to read a chapter, and answer his questions of “Who was Joseph and the Virgin Mary,” understood not what they were about, and cared not for it: they answered mechanically, as they would have answered any other kind of questions without attaching a meaning to them. All this kind of education avails them not, when they are cast upon the great sea of life with all their passions growing into full power. It is then that the work of vitiation goes on rapidly; it is then that moral control is needed: but the child is deserted when he becomes a little man, when he is launched into the world without rudder and compass.

The human mind, like fire-arms, is a dangerous thing to trifle or play with; every imaginable atom of it is continuously at work for good or for evil; the seed-field of opinion is mightily fruitful, but the true mustard-seed that flourishes so rapidly is the mischievous doctrines sown in the minds of the uneducated, by the cheap publications hourly issuing from the press. The mind is a power which may constitute a nation’s strength: it may also constitute its weakness. Opinion is the only power now, and the true ammunition manufactories are the charity-schools. Not that they do much for their pupils in the way of thought. Their teachers possess no talent beyond the nursery-maid, or, at the farthest, the preparatory schoolmistress, who qualifies the infant for the master to educate: thus much they do for the pupils; they teach them to read, and no more; the actual teacher is the cheap seditious, licentious and obscene portion of the press.

It can scarcely be imagined that any true philanthropist or good Christian is adverse to the instruction of the poorer classes, or even unwilling to give them the relief which their necessitous condition often requires, so far as the mere parting with a sum of money is the only question. In both cases, however, the use to which the poor are likely to apply these gifts ought to enter into our consideration: as the drunkard beggar wastes in drink all that he can get from mistaken charity, so does an un-informed poor man’s child misapply (for want of substantive instruction) his knowledge of the art of reading.

There is a strong tendency in our nature to evil, which is ever found most actively operating among the poorer classes, more especially in densely-populated neighbourhoods. With this fact before us, let us ask ourselves, whether the mere exercising the memory for a few hours a day in acquiring a knowledge of reading and orthography, and in learning articles of faith, independent of all discipline of the understanding, is an antagonist power efficient to meet the evils of bad associates abroad, together with bad example and bad training at home? Is scripture-reading all-sufficient, in the early days of youthful thoughtlessness, to counteract the corrupting influences which often surround poor children? However tenaciously well-meaning folks may hold to this cure for vice, experience tells us that in youth it is inefficacious.

But we shall be told by the directors of these schools, that they inculcate both religion and morality, besides teaching the catechism and making children acquainted with the scriptures; and then they will ask, if this is not education? We reply by referring to our previous remark, that education, to be effective, must draw out and expand the reasoning faculties: the encumbering of the memory with matter unsuited to their years, and the teaching of religion or morality through the medium of terror, will either depress and cramp, or ultimately render young minds daring and reckless. Now that the rod is generally laid aside in the schools for the poor, the terrors of future punishment and all the examples of God's vengeance are brought into play. When the mind is in bud, half peeping out, preparatory to its full expansion, and viewing the world of objects around, the refracting glass is placed before its eyes to distort and blacken the joyous objects of nature. It is true, the passages in scripture and the selections made for reading lessons in which the Supreme Deity is represented in all his goodness towards us, are not kept from their sight, but then every sentence of denunciation is put in the foreground; the terror of the Almighty's anger takes precedence in our school reading-books of his mercy, goodness, and justice; the children are not taught, in the books they read, so much the advantages of virtuous conduct, as the punishments of vice.

The human mind is not suited or formed to thrive under a threatening system of education or government, but is peculiarly constructed for mild and encouraging treatment. We believe, that, under our present mode of managing the children of the poor in this country, more human intellect is lost to the world than gained; and that the genuine sentiments of *natural* (which is the foundation stone laid in the conscience by God, for the

reception and belief in revealed) religion are much deteriorated and weakened by the super-officiousness of persons well meaning but unskilled in the knowledge of their own nature.

It may be admitted that the foundation of education must be laid somewhat in the way that is done now—in a correct system of orthography, some exact knowledge of the native language, a simplified system of arithmetic, and an extensive vocabulary; and this foundation must be laid, let the intended superstructure be what it may. But we must still recur to our chief objections. If school tuition stop here, it behoves us to consider well what uses are likely to be made of these acquirements; it is not enough to say that they may be applied properly, and that if they are not it is the fault of each individual who has been taught, and might have put out his talent to better interest.

Without doubt, thousands of boys and girls go no farther than reading and writing, and yet make respectable members of society. But if these instances were inquired into, it would be found that the children possessed moral, prudent, and naturally intelligent parents, who not only exercised a moral control over their offspring, but, in the strict sense of the word, hourly educated them, by gradually forming the judgment to entertain accurate ideas of right and wrong; while the majority, having ignorant parents of the lowest habits, invert the order of relationship as respects control. The son says to the father “I have had *learning*, you can’t read, what should you know about it?” Thus the child gains an ascendancy over the parent, becoming self-willed, conceited, and of course idle: he must look to something better than the calling of his father (who, by the way, is ever boasting of the scholarship of his son): the common termination of the boy’s course is confirmed profligacy and crime.

A conscientious doubt is entertained by many persons of the policy or philanthropy of educating the poor at all, probably upon the principle that *ignorance is bliss*. But surely, if we lay the foundation, we should erect some kind of superstructure upon it, not allow the ground-landlord (ignorance) to seize upon it for his own use. Some persons seem to think we are hitched upon the horns of a dilemma, and that whichever way we now turn we shall be in error; but as it is pretty generally agreed that we cannot very well recede, had we not better try the experiment of a progressive movement? Let us not remain in known and ascertained error; the cloud thickens upon us; good intentions will not remedy the evil; the facts are against the system; the poorer classes hourly gain strength in hatred for the rich, and unbelief in revealed reli-

gion, without having any sound principles to guide their conduct; and these are the fruits of millions expended upon their education.

If mankind are ever to be rendered enlightened, virtuous, and happy, it must be by removing all the prejudices of ignorance, and not by confining the knowledge of truth to a small number of persons, which is nearly as bad as leaving her in her fabled well.

The only difficulty that now lies in the way of educating all classes, at least to some point of usefulness, and so far to the enjoyment of greater happiness, is the ambition that sects and parties have to govern and to lead the minds of those whom they undertake to educate; to implant fixed opinions, and enslave, instead of freeing the mind from prejudices. All would have their pupils become sectarians in religion and partisans in politics; they would have them educated only to this point: when they become unruly, and look for any knowledge out of their school, education must stop. The party who are open would-be destructives, aware of this, recruit their own forces from the poor, by publications adapted to their tastes and pockets. If the poor had been really educated, they would, in all probability, have attached themselves to a party more rational in their views, and less mischievous in their designs. In national education all differences of opinion in religion and politics should be laid aside; we should endeavour to fortify the mind against prejudices and error by inculcating principles of universal truth; and we should prepare all men for the duties of social life by that kind of discipline which shall render the passage from boyhood to manhood safe and easy, instead of being, as it now is, a sudden and often a dangerous transition.

A poor man in civilized life may in a considerable degree be looked on as a savage, who with difficulty procures his food and the other necessities of life; he has no time to cultivate his understanding, or to listen to the voice of tender and generous affections. Such men should be especially encouraged to contemplate the surrounding objects of nature, and to study the most simple laws of mechanics and chemistry; and the better to enable them to do this, while as boys they are at the national schools, they should read books descriptive of the kind of labour and the processes by which, it is most probable, they will be called upon to obtain a living. They should read books, and receive oral instruction at the same time, which should tend to give them notions, sound as far as they go, of the most general laws of animal physiology, of the principles on which mainly depend the pre-

servation of health, and the practical rules as to exercise, cleanliness, and sobriety, deducible from these principles : they should be taught the general laws which govern the production and distribution of wealth, and, in a word, their education should be directed towards making them profitable members of that society in which they must live. Idle hours will thus be provided for by directing the turn of thought when young ; scenes of revelry and drunkenness would then lose their charm ; an engaged mind seldom lapses into a state of irredeemable stupid, sottish animalization. The impulses of the appetite can only be restrained by reflection, the subjects for which should be well selected and simplified, and form the earliest reading lessons of the poor ; and the best subjects for forming this habit of reflection in children are the phenomena of nature. The only effectual way of redeeming the mind of the lower classes is to begin with nature ; turn their thoughts to her works, and every other good effect will follow.

REVIEWS.

Programmes de l'Enseignement de l'Ecole Royale Polytechnique arrêtés par le Conseil de Perfectionnement, et approuvés par le Ministre de la Guerre pour l'Année scolaire 1834—1835.

IN the first volume of this Journal we gave a sketch of the History of the Polytechnic School. We have no materials for continuing that sketch further, except the *brochure* of which we have cited the title, and which refers to the course of study only. We shall in this article offer some remarks on the state of the higher sort of instruction in France and England, as it may be gathered from the comparison of our own institutions with that under consideration. The great points of the system in the Polytechnic School are, 1. The selection of the best candidates by means of a strict examination upon a closely-defined and previously-indicated course of study : 2. The training of the candidates during two years in an extensive system of mathematics, physics, and engineering ; so that each may be more than half prepared for the active duties of any one of the public departments : 3. The formation of military habits.

On the first point, we shall give the attainments which are expected from every candidate at more length than in our former article. They are exactly the same now as in 1830, showing that it has not been found impracticable to obtain candidates with the required degree of knowledge.

I. ARITHMETIC, with the theory of proportions, progressions, logarithms, the use of the tables, and the explanation of the *système métrique*.

II. Elementary GEOMETRY, comprising the properties of spherical triangles.

III. ALGEBRA, containing the solution of equations of the first two degrees, that of indeterminate equations of the first degree, the theory of fractional exponents and of exponentials, the demonstration of Newton's binomial theorem in the case of whole and positive exponents only, the general composition of equations, the rule of signs of Des Cartes, the determination of commensurable and equal roots, the resolu-

tion of numerical equations by approximation, the elimination of two unknown quantities between two equations of any degree.

IV. Rectilinear TRIGONOMETRY, and the use of the tables of sines.

V. Synthetical STATICS applied to the equilibrium of the most simple machines.

VI. The complete discussion of the lines represented by the equations of the first and second degree, and the principal properties of the conic sections.

VII. An example of the solution of a rectilinear triangle will be proposed to each, to prove that he can use the tables of logarithms: the table to be of seven places.

VIII. The candidates must translate a portion of a simple Latin author, and write on a given subject in French, in legible writing and correct spelling.

IX. They must copy a pencil drawing in shading.

X. They must construct with the ruler and compasses some problems of elementary and descriptive geometry.

All the preceding articles are stated to be equally obligatory, and though knowledge of experimental philosophy and chemistry is not absolutely required, it is announced that any acquaintance with them will be taken into account.

The number of hours given to instruction in each part of the subsequent course of study has varied a little, as the following table will show: the first column is copied from the article in our first volume already cited.

Hours.			Hours.		
First Year.			Second Year.		
1830	1835		1830	1835	
Mathematical Analysis	52	52	Mathematical Analysis	65	44
Geometry	15		Geometry	15	
Statics and Dynamics	52	33	Mechanics	75	41
Descriptive Geometry	108	72	Geodesy	28	29
Analysis applied to Geometry	24	13	Machines	22	22
Physics	51	32	Political Arithmetic	6	6
Chemistry	54	36	Physics	42	30
French Composition	31		Chemistry	54	36
Topographical Drawings	33		Architecture	51	36
Figure and Landscape Drawing	45		German	32	
History, Belles Lettres, &c.	34		Topographical Drawing	34	
			Figure & Landscape Drawing	45	
			History, Belles Lettres, &c.	34	

It thus appears that the course has been considerably reduced, but in what manner we have not the means of explaining. It must be remembered that the *conseil de perfectionnement* is perpetually occupied with the consideration of what should be struck out or added; and probably experience has shown that many details may be shortened or avoided.

We have already alluded (in our previous article) to the large supply of excellent elementary works which have sprung from the wants of the Polytechnic School. By the successive editions of these treatises, we are enabled to judge whether the several parts of the course are in a state of extension or abbreviation ; and we may at once fix upon a prominent instance in the *Traité de Mécanique* of M. Poisson. The first edition of this work was published in 1811, the second in 1833 ; and it must be considered as one of the most remarkable, if not the very best, elementary treatises on any part of mathematical physics. We find in the second edition not only a considerable increase of matter, but also the assumption of higher mathematical attainment on the part of those who read it. This work is used in the *Ecole Polytechnique*, and is evidence of the opinion of M. Poisson, who is or was engaged there, of the increase of mathematical power in the average students of that institution.

One peculiarity of the Polytechnic School is this, that though a previous course of study is laid down in detail, no particular book is insisted upon. So long as the candidate comes with the requisite knowledge, it is not asked where or how he got it. The consequence is, that every teacher abroad, and every professor or examiner within the walls, is at liberty to publish preparatory works, in which the subject is prescribed and not the manner of treating it. There is much practical wisdom in this arrangement, for it ensures to the student a multitude of works all bearing directly upon his wants, out of which his instructor can choose that which appears most suited either to the case of the pupil himself, or to his own methods of teaching. It is the good policy which insists that wholesome meat, and none other, shall be brought to market, but does not inquire whether it is from the east or the west, and will not permit any thing like monopoly.

This middle course is held between two others, each of which has inconveniences, and those of a serious nature. The first is, the absolute prescription of certain books of examination, by the refusal to accept the notation or methods of any other. The evil of such a regulation is two-fold. In the first place, it is not easy to change an established work, even when it has become clear that those which have come after it are better. Institutions are altered with difficulty, an excellent thing in cases where institutions are necessary, but a positive evil where their existence is a matter of indifference. In the second place, when the time is come for a change, and universal assent has been obtained to the opinion of its necessity, how is it to be efficiently made, where the

talent which should supply the new work has not been exercised? It needs many treatises to make a good book. The minds of those who attend to the subject in question should be perpetually turned upon the methods of simplification and the improvement of them; which cannot be the case where no opportunity of introduction is offered until the character of the work has received the approbation of a board, the most sluggish and hesitating of all organized beings. We see in France the happy effects of continual competition in elementary treatises, which has caused the road to be smoothed and levelled till the examiners are able to ask and obtain such a degree of mathematical acquirements from candidates of sixteen years of age, as would have made a prodigy a century ago.

The other course which might be followed is not to insist upon any specific course at all, but to take the best qualified candidates who present themselves. This, though it appears to avoid the evils of the last method, and really does so in some degree, does not fully accomplish that end, and introduces another disadvantage of a different kind. In the first place, the competition thus excited does not bring different elementary writers to exert themselves upon the same subject, in the close sense in which the word may be used with respect to the different elementary works published in France. For not only is the method of handling the propositions left open to the writers, but, to a considerable extent, the propositions themselves. Thus each author may choose his own ground in the various regions of an extensive science, and must exercise his own judgment not only as to what he shall say on geometry, algebra, &c., but what he will consider to be meant by the terms themselves. And in this respect we are inclined to think, that, with reference to the studies of any public place of education, the province of many is intrusted to individuals in a manner which cannot act otherwise than prejudicially on the majority of students. We think a combination of heads would much better decide what is or is not a useful course of geometry or mechanics, than any one person; though the individual would be more competent to carry the decision of the collective body into practice. Every man who thinks for himself upon any subject is positively certain to get some peculiar mode of his own of viewing it, or some of its parts, which he himself will hold to be the very clearness of truth, while all the rest of the world will dignify his favourite notions with the title of *crochets*. When the peculiarities of the individual writer have reference only to the mode of establishing or connecting propositions, no harm can result to the student, supposing the reasoning presented to him to be commonly

sound. But when they induce an author to change the frame of a subject ; to give an undue degree of importance to particular details ; to omit as useless that which the general voice has decided to be useful, &c., there is this obvious evil, that the student is not made to employ his time usefully in every respect. He may be improving his reasoning powers, but between two methods of doing so, that should be chosen for him which will also produce results of practical use, the ultimate object of his studies being considered. We need not insist upon the discordant systems of notation which perfect liberty has a tendency to introduce.

In the second place, the student who wishes to proceed without a tutor is placed in a situation of very great difficulty by the neglect of the authorities who govern examinations to define their extent and general subject-matter. And this is the greater evil of the two, for the one discussed in the last paragraph must be comparatively partial. There are certain theorems which, generally speaking, writers will agree in introducing ; and their principal differences will be in the developments and applications which are posterior to these theorems. But it is about these that the student will be most puzzled. Suppose that he examines several works at a time when he has attained some degree of knowledge. The question immediately arises whether it would be worth his while to superadd to what he has learnt from one treatise, the additional details in which another differs from it. If treatises were few, and subjects not extensive, he would be at no loss ; but there are many writers, and many distinct branches of all the great divisions of mathematics. None but those who have experienced it can guess at the feeling of bewilderment with which a student looks upon a mass of elementary works, upon the details of which he is not furnished with any test to distinguish that which he should read from that which he should not. The idle and unenergetic despair, and the better class are led into the substitution of reading, and desultory reading, instead of thinking. The system of the *Ecole Polytechnique* has avoided these disadvantages ; there are many elementary works above mediocrity, all having such a degree of likeness in the results they teach, as renders it immaterial on that score which the student reads.

When we turn to England, we find no single institution which offers points of comparison with the *Ecole Polytechnique* in every particular. If we consider the latter as a school of engineers, and especially of military engineers, we can only find the Academy at Woolwich with which to compare to it. But if we view the French school as an institution

in which the higher mathematics are so taught as to produce teachers and investigators, we must consider it as occupying the position which in our country is filled by the University of Cambridge.

And the necessity of thus dividing the functions of the Polytechnic School for the purposes of external comparison is a singularity not a little honourable to the French nation. That an *école spéciale* for military engineering and public works, which it originally was, should have rid itself of that title, by producing in one generation Poisson, Poincot, and Cauchy as analysts, and Bourdon, Garnier, and Boucharlat as elementary writers, to say nothing of a host of others, distinguished in matters more immediately connected with the education they must be presumed to have received, is a phenomenon worth studying.

The academy of Woolwich does not, we believe, insist on any preparatory examination of such a character as would make us think it fair to compare their pupils with the young successors of the names we have just mentioned. The age at which the cadets are admitted is younger than that required at the *Ecole Polytechnique*, so that we may consider the first year at the Royal Academy as spent in those studies which are preliminary to admission at the Polytechnic School. What we have here to consider is, the effect of a particular book, which is prescribed by authority and usage, and adopted both at Woolwich and Addiscombe, and, we believe, at Sandhurst.

The Course of Mathematics, by Dr. Hutton, considered with reference to the author only, entitles him to the gratitude of the army in this country. Before his time, there was no compendium of engineering mathematics which was likely in any way to supply the wants of those who would need such knowledge. As far as we can judge of the species of propositions which it would be necessary to place before a military student, the work of Dr. Hutton is full of useful matter, and of nothing else. The third volume, too, is, in some respects, a concession to the growing knowledge of analysis, which is good as far as it goes: and it is saying something that trigonometrical formulæ have been introduced in an algebraical form, though it be only in the supplementary volume. What we have insisted upon as the advantage of a specified course is obtained from the work of Dr. Hutton, namely, that, well or ill, the useful part of mathematics is taught, to the exclusion of the (for their purpose) useless.

But when we come to look at the manner as well as the matter, we cannot help wishing that, the propositions only

being given, a wider range of talent had been employed in the digestion of the elementary work to be constructed on them. Considered as a mathematical work, there is a great deal in it which we could in no way receive, unless we were in the army, and had a written order from a commanding officer. But in the Polytechnic School, discipline is not carried to such an extent; and we do not much regret the difference, or throw blame in any quarter. We should be very sorry to see here, as in France, a great part of the public mind and energy concentrated upon the means of making the army efficient. We would rather look for our Poissons elsewhere than at Woolwich. But between the two, there is a point which might, we think, be reached without much difficulty.

We find the other extreme in the University of Cambridge, but at the same time with different objects and modes of carrying them into effect. The system of each place, though it has its disadvantages, is so contrived as to take the least of the current evils, the end to be attained being considered. The artillery officer may point a gun admirably well, by means of a result of which he knows no demonstration; while the Cambridge student may bring to bear upon his pursuits in medicine, law, or politics, the habits of reasoning which he has acquired by handling matters of little use in themselves. But while we should suggest to the ruling powers of Woolwich, that a little more reasoning, and a somewhat wider view of mathematics, would not of itself hurt the officer or the gentleman, we should say to the tutors at Cambridge, that more system in their selection of results would not of itself nullify the good effects of the mental discipline undergone in the attainment of them.

We have several times had occasion to remark, that what shall be considered to form the staple of mathematics at Cambridge in any one given branch, can by no means be inferred from any one book. Every writer does just as he pleases, both in the manner and matter. The consequence is, that the student is completely in the situation we have before alluded to—lost in a hopeless mass of books, without any power of defining either the relative importance of the different subjects, or of their details, except what he may get from his tutor. It is true that the examination papers of previous years may give some idea of the most useful course of reading; but this, be it observed, not to the ordinary pupil, but only to his tutor: for to understand the questions of the examinations supposes an understanding of the subjects examined in. Let us run over some of the principal branches of science, which, both from the examinations and the works

published for students, we see to form the mass of a student's reading. We have the elements of arithmetic—of plane geometry—of algebra—of plane and spherical trigonometry—of solid geometry—taking all these in their most confined sense. Then we have the theory of numbers—the theory of equations—of algebraic expansion—of the differential calculus—of curves and surfaces—of the calculus of common integration—of differential equations—of finite differences and integrals. In physics we have common as well as analytical statics and dynamics—the theory of central forces—of hydrostatics and hydrodynamics—of plane astronomy—common optics—the undulatory theory of light—the lunar and planetary theory—the mathematical theory of electricity, &c. &c. &c. We have enumerated nothing but great divisions of mathematics or physics, and we might fairly extend our list, if difficulty and length of detail entitle a branch to a separate name. That so vast a mass of reading really is undertaken by many students during their undergraduateship is well known, and the number of propositions which are considered as fundamental is considerable. How the matter is managed is as follows:—The student, or his tutor for him, makes a selection out of the whole assemblage of theorems, of propositions which are considered so important that he should not trust them either to common memory or the combination of memory and original power which habit renders trustworthy. These propositions the student, in the common phrase, *gets up*; that is, reads and writes until he is perfectly ready to answer any one of them at a moment's warning. The remainder, which are generally more or less simple deductions from the main propositions, are intrusted to the habit above mentioned. Thus, there are many who are not ready with questions except those they have got up; others of more power can trust their memory and the semi-inventive faculty above alluded to to a very large extent. Here and there is an instance of a youth more ambitious than able, who *gets up* mathematical subjects without understanding them. There is every possible grade of acquirement, from the student just alluded to, to the one who can trust his faculties to almost any amount, and, higher still, to the one who has both talent and determination not to trust it with matters which industry and perseverance can make certain. We have stated the preceding circumstances, because our readers who have not been at the University are apt to imagine that the examinations are either all memory or all invention, and who only know examinations such as they were at school in the last generation, in which it would have been thought preposterous

to expect any thing to be answered which could not have been previously learned by rote. Now the preceding being the case, and the distinction between *reading* and *getting up* a proposition being so well known and established as to have a name which is in the mouth of every one, surely the University has long ago helped the student by publishing a digest of the most useful propositions, indicating merely what ought to be considered as of most importance? Or if the University has not done it, one of the two large colleges has caused it to be done for its own pupils? Or at least some individual, whose opinion would be highly rated at Cambridge, has published his own syllabus of the course which he considers most fundamentally useful? Neither one nor the other. There is no other way of obtaining any knowledge of what degree of importance should be attached to the several parts of the course than by taking the opinion of an individual tutor or writer of an elementary treatise.

It has often puzzled us exceedingly to account for this apparent apathy and neglect of a most useful means of guiding the student through a mass of reading which has increased to a most fearful extent. There is a large number of men who are actively employed in instruction, and zealous in promoting their views of it. They write elementary works in abundance, and correct and enlarge them at every successive edition. We are not surprised that individuals will not undertake to give an opinion on the whole course; but how comes it that the idea of the *conseil de perfectionnement* has never been carried into effect? If a dozen individuals whom we could name would each take charge of a subject, draw up his own syllabus, and submit it to the other eleven, by whom it might undergo discussion, six months would produce the most useful syllabus of mathematics and mathematical physics which has ever appeared.

Surely it could not be feared that such an undertaking would have a tendency to arrest the progress of the sciences at Cambridge, and fix them at the point at which they now are. If it were so, for ourselves we should be glad to feel sure that without it *they would not decline*: but without dwelling on this, surely a self-elected *conseil* would not have reason to dread their work acquiring the authority of one emanating from a fixed authority. Another and another would succeed in course of time, or the primitive work would undergo continual revision, and the student would have the satisfaction of knowing the opinion of some of the most distinguished men in the university on the proper course of reading. No under-graduate, in the competition for honours

which is always in his sight, would think the publication of such a work any reason for limiting his reading to its contents ; it would merely say to him—this *first*, and as much more as you can.

It must be remembered, that many of the under-graduates who distinguish themselves become private tutors immediately. This class of teachers is most particularly in want of such a guide. A young man, fresh from his own studies, with no knowledge of teaching, and with all the impressions of his own first views hanging about him, is very likely to be an inefficient tutor in the very point in which a syllabus of high authority would prevent his failing.

The *programmes* of the Polytechnic School now before us remind us that at that institution every thing which is taught is in a continual state of probation, and may be dispensed with in a year, if anything better be found. Something of the sort we have long wished to see engrafted upon the republican constitution (in matters of teaching) of the University of Cambridge. To all other advantages of such a work as we have recommended, must be added that which would accrue to those students who are preparing themselves for the University, and who, as may be supposed, are still more at sea as to the course they should pursue, than those who have commenced residence. But we feel quite sure, that before long, the necessity of meeting the evil will speak loud enough to make itself heard.

We must endeavour to avoid being mistaken upon one view which may be taken of our remarks. Cambridge, as a school of science, for those who can bear its course of reading, remains just as it was, whether the course we have recommended be taken or not. There will always be the two or three students in each year, who conquer difficulties by their own energy, read with a power of selection, convert almost anything into nutriment, and come to the examinations, hardly recollecting what books they have read, but only what they have got from them. These will afterwards fill the prominent stations in the University, and will enable the rest of the world to elevate their opinion of the place which has produced a — and a — and a —. But in the meanwhile the effect of the system upon the second, third and fourth rate class of students is to be considered, who are not heard of, but carry the results of their education silently into the world, to affect it for good and for evil, more than the isolated few whom we have mentioned. It is the besetting sin of *all* public places of education to become hotbeds for forcing the first order of talent to the neglect of the

rest. For ourselves, we judge by the average results: we have heard several distinguished members of the University in question express their desire of seeing the system mend with respect to those whom nature has not placed in the highest rank, and we do not despair of seeing the more difficult part of the task of instruction at last entered upon. It must be remembered that those who are pointed out as proofs of a good system, are generally those who would have instructed themselves under any system. The question always should be, How are those taught who most want teaching?

Etymologische Forschungen auf dem Gebiete der Indo-Germanischen Sprachen, mit besonderem Bezug auf die Laut-Umwandlung im Sanskrit, Griechischen, Lateinischen, Littauischen, und Gothischen. by Dr. A. Frederick Pott, Professor in the University of Halle. Lemgo, 1833. lxxxii. and 284 pp. 8vo.

Etymological Researches in the Department of the Indo-Germanic Languages, with particular reference to the Interchange of Sounds in the Sanscrit, Greek, Latin, Lithuanian and Gothic, &c.

WE resume our remarks on Mr. Pott's Etymological Researches,* in order to lay before our readers some account of the principal portion of his work, which is devoted to an inquiry into the interchange of sounds, consonants as well as vowels, traceable in words etymologically corresponding to each other in the Sanscrit, and its European and Oriental sister-languages.

It is, as Mr. Pott observes, highly probable that in all languages only the simple vowels, *a*, *i*, and *u*, primarily existed, and that all other vowels arose out of these three elementary sounds by mixture, or in some instances by their mutual influence, when placed in close proximity to each other in the same word and in successive syllables. The examples which Mr. Pott and others have adduced in illustration of this theory are chiefly taken from the several branches of the Indo-Germanic family of languages. Many might be added from the Arabic and other Semitic languages: the Arabic vowel *fat'ha*, for instance, is generally admitted to express the sound of the Italian *a*; yet we find it frequently rendered by *e* in proper names and words occasionally quoted by travellers

* See 'Journal of Education,' vol. ix. p. 327.

in the east ; and almost invariably so, whenever the succeeding syllable contains a long *i*, as in the word *kebîr*, 'great,' which according to its orthography should be *kabîr*, and which has in Spanish been corrupted still farther into *quivir* (in *Guadalquivir* = *Wâdi-al-kabîr*, *i. e.* the Great River). In Sanscrit the short vowels, *a*, *i*, and *u*, only* are represented by distinct characters, and if we consider the extreme accuracy with which, in the Dêvanâgarî alphabet, all the varying articulations of the human voice are expressed, we are driven to the conclusion, that at the age when that alphabet was invented to fix the various sounds and combinations of sounds occurring in the Sanscrit language, the latter possessed no other short vowels but these three. It is extremely improbable, that in an alphabet which expressed the nice difference between *t* or *d* as pronounced by applying the point of the tongue either to the teeth, or to the roof of the mouth, so striking and palpable a distinction as that between *ô* and *û*, or between *ě* and *ĩ*, should have been overlooked, had the sounds *ě* and *ô* then existed in the Indian language. Our conclusion is confirmed by a remark made by Colonel Vans Kennedy, who distinctly asserts, that even in the vernacular idioms now current in India, he never was able to detect any sounds similar to the Italian short *e* and *o* in the pronunciation of natives from all the different provinces of India.

The Sanscrit seems in this, as in many other respects, to have preserved the original character of the family of languages, to which it belongs, with greater purity than any of its sister languages : and it is the duty of the etymological inquirer, to ascertain in what proportion the latter have adhered to, or have more or less widely receded from that standard. In the remarks which we are about to make on this subject, and which for the most part we shall take from the work before us, we shall confine ourselves to the relations between the Sanscrit and the Greek, calling in the aid of other cognate languages only when the occasion shall require it.

The short vowels, *ă*, *ĩ*, *ũ*, in Sanscrit, generally correspond to the Greek *α*, *ι*, *υ* ; the Greek language has seldom *confused* these three vowels by substituting one for another ; but its two short vowels *ε* and *ο* have each their share of the province which in Sanscrit is left to the *a* solely ; and as yet it seems impossible to determine the principle on which the Sanscrit *a* either remained *α*, or became *ε* or *ο* in Greek. We subjoin some examples of the correspondence of these vowels,

* We purposely avoid discussing in this place the question, whether the Sanscrit vowels *ri* and *hi* are entitled to be considered as simple vowels.

distinguishing in each its occurrence in roots, or primitive parts of words, and in suffixes.

I. Sanscrit *a* corresponding to *a* in Greek.

1. In roots, &c.

Sanscrit, *labh* (to take), Greek ΛAB , λαμβάνω.

das (to bite), ΔAK , δάκνω.

dam (to tame), ΔAM , δαμάω.

tan (to extend), TAN , τανύμαι.

han (to kill), ΘAN , θάνατος, &c.

apa, *ava* (off, from), ἀπό.

asru (a tear), δάκρυ.

sata (hundred), ἑκατόν.

a (negative prefix), ἀ-.

2. In terminations, suffixes, &c.

as, the termination of the accusative case of the plural number, of masculine words the crude-forms of which end in a consonant, corresponding to the Greek *as* in λέοντ-ας, &c.

man is in Sanscrit the termination of a number of substantives derived from verbal roots, and generally denoting the result of the action implied by the verb: e. g. *janman* (nomin. *janma*), 'birth,' from the root *jan*, 'to produce, to bring forth;' *karman* (nomin. *karma*), 'an action, a deed, whether good or evil, from the root *krī*, 'to do.' To this termination corresponds the Greek suffix -μα, genit. ματος, in ὄραμα, 'spectacle, anything seen,' from ὁράω, 'to see;' δῆμα and δέμα, 'a tie,' from δέω, 'to bind or tie,' &c.

an is in Sanscrit the termination of the crude-form of the numerals for five, seven, eight, nine, and ten, *panchan*, *saptan*, *ashtan*, *navan*, *dasan*; the corresponding Greek numerals have dropped the final *n*, and three of them, ἑπτά, ἑννέα, δέκα, have retained the *a* throughout; while πέντε and ὀκτώ* have kept it only when placed in composition before other parts of speech, e. g. ὀκταέτης, ὀκτάμη-νος, πενταέτης, πεντάπηχυν, &c.

tham is in Sanscrit the suffix of the pronominal adverbs *katham*, 'how?' and *ittham*, 'thus, so;' the latter may possibly be identical with *iṣā*-† in the word *iṣāgenḥas*, 'of equal birth, lawfully begotten,' which would thus be more satisfactorily explained

* The *o* in ὀκτώ evidently corresponds to the termination *au* in *ashtau*, the nominative case of *ashtan*. The same termination is preserved in the Latin *octo*, and still more distinctly in the Gothic *ahtau*.

† Instead of *ittham*, the form *itthā* is occasionally met with in the dialect of the Vedas: (Rig Veda, Sanhita, b. i. lut. 2. st. 13; lut. 3. st. 6.) this form is not noticed by Pānini, but he has recorded another perfectly analogous archaism, namely, *Kathā* instead of *Katham*. (Pān. 5. 3. 26.)

than by ὁ ἰθὺ καὶ ἀδιάφορον ἔχων τὸ γένος, as the Etym. M. renders it.

II. Sanscrit *a* corresponding to *ε* in Greek.*

1. In roots, &c.

Sanscrit, *pat* (to fall), ΠΕΤ, πέτομαι.
pach (to cook), ΠΕΠ, πέπτω.
ad (to eat), ΕΔ, ἔδω.
tap (to be hot), ΤΕΦ, τέφρα.
taksh (to build, to make), ΤΕΚΤ, τεκταίνω.
dakshina (on the right hand side), δεξιός.
abhi (near), ἐπί.
pari (around), περί.
aham (I), ἐγώ.
hyas (yesterday), χθές.

2. In terminations, forms of inflexion, &c.

a, the augment of several forms of the preterite tense in Sanscrit has in Greek become *ε*.

as is in Sanscrit the termination of the nominative case in the plural number, of substantives the crude form of which ends in a consonant, corresponding to the Greek *-εs* in λέοντ-εs, &c.

The *a*, in the terminations of the Sanscrit verb, has in Greek passed alternately into *ε* and *ο*, apparently without any particular rule to decide in which cases the one, and in which the other, should stand.

III. Sanscrit *a* corresponding to *ο* in Greek.

1. In roots, &c.

Sanscrit, *sad* (to go), 'ΟΔ, in ὁδός.
pad (to go), ΠΟΔ, in ποῦs, ποδ-ός.
pati (husband, master), πόσιs.
dama ('a house,' in the dialect of the Vedas), δόμος.
pra, *prati*. πρό, πρόσ, προτί.
sama (alike, the same), ὁμο- in compound words; ὁμοιος, &c.
sah (he), ὁ, ὅs (for οὔτος or ὅδε).

2. In terminations.

as is in Sanscrit the termination of the genit. case singular of substantives, the crude-forms of which end in a consonant, corresponding to the Greek *οs* in λέοντ-οs, &c.

a, as the termination of the crude-forms of a large number of Sanscrit nouns (substantives, adjectives, and participles), corresponds in the majority of instances to *ο* in Greek: * e. g. *asva*, 'a horse,' ἵππος; *urika*, 'a wolf,' λύκος; *khanitra*, 'a spade, a hoe' (from the root *khan*, 'to dig, to hurt,' and *tra* (the suffix of words denoting an instrument), κέντρον, &c.

* See Bopp's *Vergleichende Grammatik*, p. 137.

Instances of words in which a Greek *ι* or *υ* corresponds to *a* in Sanscrit are of much less frequent occurrence ; among the examples of the former, given by Mr. Pott, *κίλλος* = *khara*, 'an ass,' and *ἵππος* = *aśva*, 'a horse,' are the only two which will be generally admitted ; since the *ι* in words such as *ἴσθι* (from the root *ἔΣ*, in Sanscrit *as*, 'to be'), *χθιζός* (from *χθές*, in Sanscrit *hyas*, 'yesterday'), *πίτνω* (from *ΠΕΤ*, in Sanscrit *pat*, 'to fall, to fly'), seems to be the result of a secondary change, produced by some euphonic principle, peculiar, perhaps, to the Greek language. We do not perceive that Mr. Pott produces an instance of *υ* corresponding to *a* in Sanscrit ; the only example that occurs to us, is *νύξ*, *νυκτός*, *νύκτερος*, &c., as connected with the Sanscrit adverb *naktam*, 'by night.' That a substantive *nakta*, 'night,' did formerly exist in Sanscrit, is evident from the Vedaic compound *Naktoshasā*, 'night and dawn.' The current Sanscrit words for 'night,' *niṣ* and *nīsa*, seem to be a-kin to both *naktam* and *νύξ*.

A Latin *i* corresponds to a Sanscrit *a* in the termination *tinus*, in *crastinus*, and perhaps *protinus*, which seems the same as the Sanscrit termination *tana* in *hyastana* (hesternus), *suastana* (crastinus), *adyatana* (hodiernus), &c.

Among the remarks made by Mr. Pott upon the other Sanscrit vowels, we must here confine ourselves to notice merely what he says with reference to the long *ā*, and the vowels corresponding to it in Greek, *α*, *η*, *ω*. He observes that, with the exception of a few cases in which *η* has manifestly grown out of an *ε*, as in *φιλάσω*, for *φιλήσω*, from *φιλέω*, in nearly every other instance where the Æolic and Doric dialect have an *α*, while the Attic or Ionic dialects have *η*, the former are to be considered as having kept nearest to the original form of the language. We subjoin some examples of Sanscrit words having a long *ā*, with the corresponding Greek word :

sthā (to stand), ΣΤΑ, ἵστημι.

gā (to go), ΒΑ, βαίνω.

bhā (to shine, to appear), ΦΑ, φαίνω.

pā (to preserve, to keep), ΠΑ, πάσμαι.

suddu (sweet), ἄδύς, ἡδύς.

*bhrātrī** (brother), φράτωρ, φράτρα, φρατρία.

mātrī (mother), μάτηρ, μήτηρ.

dhā (to put, to place), ΘΗ, τίθημι.

pā (to drink), ΠΩ, πίνω.

dā (to give), ΔΩ, δίδωμι.

jñā (to know), ΓΝΩ, γινώσκω.

* From *bhrātrī*, according to well-established analogy, a collective substantive of the neuter gender, *bhrātra* might be formed, which would signify 'an assemblage of brothers.'

āsu (swift), ὤκύς.

bhāu (arm), πῆχυς.

jānu (knee), γόνυ, γούνατα.

The termination of a great number of Sanscrit nouns of the feminine gender is *ā* : to these correspond Greek substantives, or feminine forms of adjectives, ending in *ā* or *η*, and Latin words in *a*, which termination has become short by corruption, but was formerly long, as appears (according to Mr. Pott's remark) from the length of the *a* in the old genitives *aulāi*, *terrāi*, *guttāi*.

The *ā* which occurs in the terminations of the cases of nouns, and in the conjugation of verbs, has in Greek become alternately *η* and *ω*. We find *η* in the termination of the third person of the dual in all Greek optatives, besides the indicative of the aorists, and in the imperfect and pluperfect tenses, where the Sanscrit has *ā*; and to the same vowel corresponds *ω* in the third person of the dual in the active imperative, and of the plural in the passive: *-ω*, the termination of the first person of the present in the active voice, is mutilated from *ωμι*, which would correspond to the Sanscrit terminate *-āmi*: and the termination of nearly all genitive cases in the plural is in Sanscrit *-ām*, which in Greek has become *-ων*. Words like *dātṛi*, 'a giver' (denoting an agent), formed from verbal roots with the suffix *-trī*, which becomes *-tā* (for *-tār*?) in the nominative, *-tāram* in the accus. sing., and *-tāras* in the nomin. plural, have in Greek split into two classes, some having substituted *η* and others *ω* for the *ā* in the suffix; e. g. *δωτήρ*, *δωτήρες*,* and *μήστωρ*, gen. *μήστωρος*.

We cannot follow Mr. Pott through all his remarks on the other Sanscrit vowels, and the sounds corresponding to them in Greek and in other languages, but we must not omit to draw attention to the plan proposed by him (in an appendix to the observations on vowels) of dividing all Greek verbs with roots ending in consonants, into certain classes, similar to those into which Jacob Grimm has divided the Gothic and old German verbs of the *strong* inflexion, according to the manner in which their radical vowels are changed or modified in their inflexions. Mr. Pott makes four such

* *Δώτωρ* seems to occur only in the vocative case, *δῶτωρ ἰδών* (Hom. Hymn. xviii. 12; xxx. 8. Odyss. viii. 335, in all these passages addressed to Mercury; but Callim H. in Jov. 91. applies *δῶτωρ ἰδών* and *δῶτωρ ἀπηνεινός* to Jupiter), which is formed in perfect analogy with the Sanscrit vocative *dātār*. But the *ω* of the suffix *τωρ* is shortened into *ο* in the other oblique cases also (e. g. *ἀμύντωρ*, *ἀμύντορος*), and in this respect the words thus formed recede from the analogy of the Sanscrit.

classes: we shall briefly state the peculiarities of each, and give a few examples.

I. The first class comprises verbs, the vowel of which remains unchanged. This class is extensive, but would probably appear less so, if in many instances the tenses, or other derivations that exhibited differences, had been preserved.

II. The second class comprises verbs with a primitive α , which is changed into ε or o in particular tenses and derivatives. Mr. Pott points out the curious and important circumstance, that the great majority of these verbs either begin with, or end in, a liquid, or a liquid preceded or followed by a mute letter. They then correspond to Grimm's eleventh and twelfth conjugation of Gothic and old High German verbs; of which the following are paradigms:—

GRIMM'S ELEVENTH CONJUGATION.

Roots ending in a liquid letter.

Gothic.

Present. <i>i.</i>	Pret. sing. <i>a.</i>	Pret. plur. <i>ê.</i>	Particip. <i>u.</i>
<i>Stila</i> (I steal)	<i>stal</i> (I stole)	<i>stêlum</i> (we stole)	<i>stulans.</i> (stolen).
<i>Nima</i> (I take)	<i>nam</i> (I took)	<i>nêmun</i> (we took)	<i>numans.</i> (taken).

Old High German.

<i>e, i.</i>	<i>a.</i>	<i>â.</i>	<i>o.</i>
<i>Stilu</i>	<i>stal</i>	<i>stâlumês</i>	<i>stolanêr.</i>
<i>Nimu</i>	<i>nam</i>	<i>nâmunês</i>	<i>nomanêr.</i>

GRIMM'S TWELFTH CONJUGATION.

Roots ending in a liquid letter followed by a mute.

Gothic.

Present. <i>i.</i>	Pret. sing. <i>a.</i>	Pret. plur. <i>u.</i>	Particip. <i>u.</i>
<i>Binda</i> (I bind)	<i>band</i> (I bound)	<i>bundum</i> (we bound)	<i>bundans.</i> (bound).
<i>Hilpa</i> (I help)	<i>halp</i> (I helped)	<i>hulpum</i> (we helped)	<i>hulpans.</i> (helped)

Old High German.

<i>i.</i>	<i>a.</i>	<i>u.</i>	<i>u, o.</i>
<i>Vindu</i> (I find)	<i>vand</i> (I found)	<i>vundumês</i> (we found)	<i>vundanêr.</i> (found).
<i>Hilfu</i>	<i>half</i>	<i>hulfumês</i>	<i>holfanêr.</i>

Mr. Pott has divided his Greek examples into four subdivisions : we shall give a few specimens of each.

1. Verbs ending in a liquid.

Aorist ii.	Perfect ii.	Present.
ἑστάλην	[στόλο]	στέλλω
ἔταμον	[τόμο]	τέμνω
ἔκτανον	ἔκτονα	κτείνω
ἐφθάρην	ἐφθόρα	φθειρώ, φθείρω
[φαρέτρα]	[φόρο]	φέρω.

2. Verbs ending in *liquida cum muta*.

—	ἑολπα	ἔλπω
—	[μολπή]	μέλπω
ἑδρακον	δέδορκα	δέρκομαι
ἑπραθον	[πύροθo, πτολίπορθος]	πέρω
ἑταρπόμην	—	τέρπω.

3. Verbs beginning with a liquid or with *muta cum liquida*.

ἔτραφον	τέτροφα	τράφω, τρέφω
ἔτραπον	τέτροφα, τέτραφα	τράπω, τρέπω
ἐκλάπην	κέκλοφα	κλέπτω
[Latin, <i>flamma</i>]	[φλόγ]	φλέγω
—	ρόπη	ρέπω.

4. Verbs without liquid letters either at the beginning or end of the root, e. g.—

ἔτεκον	τέτοκα	τίκτω.
ἐψέγην	[ψόγος]	ψέγω, &c.

The number of verbs belonging to this division is comparatively small, and we think Mr. Pott is quite right in attributing to the liquid letters in the three preceding divisions some influence in effecting the change of vowels observable in them.

III. The third class comprises verbs which in certain tenses protract the vowel as their radical syllable, e. g.,

ἔκραγον	κέκρᾱγα	κράζω
ἔδακον	δέδῃχα	δάκνω.

Mr. Pott compares these verbs to Grimm's seventh conjugation of the Gothic and old High German.

Gothic.

	Pret. plur.	Particip.
<i>Fara</i> (I travel)	<i>fōr</i> (I travelled)	<i>fōrum</i> (we travelled)
		<i>farans.</i> (travelling).

Old High German.

a.	uo.	uo.	a.
<i>Vara</i>	<i>vuor</i>	<i>vuorumes</i>	<i>varanēr.</i>

IV. Mr. Pott's fourth class consists of verbs having *i* or *υ* for their radical vowels, which are subject to a change into *ει* (*οι*) and *ευ* in certain tenses, analogous to the change called *guna* in Sanscrit grammar, and peculiar to a certain class of Sanscrit verbs. Ex.

Aor. ii.	Perfect ii.	Present.
$\overbrace{\xi\lambda\iota\pi\omicron\nu}$	$\overbrace{\lambda\acute{\epsilon}\lambda\omicron\iota\pi\alpha}$	$\overbrace{\lambda\epsilon\acute{\iota}\pi\omega}$:
$\xi\phi\upsilon\gamma\omicron\nu$	$\pi\acute{\epsilon}\phi\epsilon\nu\gamma\alpha$	$\phi\epsilon\acute{\upsilon}\gamma\omega$.

They correspond to Grimm's eighth and ninth conjugation : we confine ourselves to giving one example of each from the Gothic.

EIGHTH CONJUGATION.

Verbs with *i* for their radical vowel.

	Pret. sing. <i>ái.</i>	Pret. plur. <i>i.</i>	
<i>Greipa</i> (I seize)	<i>gráip</i> (I seized)	<i>gripum.</i> (we seized)	<i>gripans.</i> (seizing).

NINTH CONJUGATION.

Verbs with *υ* for their radical vowel.

<i>iu.</i>	<i>áu.</i>	<i>u.</i>	<i>u.</i>
<i>Liuga</i>	<i>láug</i>	<i>lugum</i>	<i>lugans.</i>

The remarks in which Mr. Pott comments upon the facts here briefly pointed out are highly interesting, and constitute in our opinion one of the most valuable portions of the work. But while we invite the attention of our readers to these remarks, we regret that we are unable to enter into a discussion of the theory advanced by him, as, in order to do justice to the subject, a dissertation of considerable length would be required.

We rather proceed to submit to our readers some remarks on the correspondences of some of the consonants of the Sanscrit with those of the cognate languages. In his remarks on this subject, Mr. Pott follows the order of the Sanscrit alphabet, in which the consonants are classed according to the parts of the organs of speech which are chiefly employed in their utterance.

Among the relations subsisting between Sanscrit guttural letters, and consonants of foreign languages, we observe upon the whole great stability, and little inclination to change. Thus the Sanscrit *k* corresponds to *κ* in Greek, or to *c* and similar sounds in Latin, in words such as the following :—

Sans. root, *krī* (to do), *κρᾶίνω*. Lat. *creare*. *Ceremonia* (*i. e.* 'that which is done or performed,' nearly analogous to the Sanscrit participle of the present passive from *krī*, *kriyamāna*).

S. root, *klid* (to be wet), ΚΛΥΔ in κλύδων, κλύζω.

S. *kapāla* (skull), κεφαλή. Lat. *Caput*.

S. *kravya* (flesh), κρέας. Lat. *Caro*.

S. *kêsa* (hair). Lat. *Cæsaries*.

In some instances the guttural has degenerated into a labial sound; e. g. in the Greek ἡπαρ, gen. ἡπατος, answering to the Sanscrit *yakrīt* and the Latin *jecur*; and in the interrogative pronouns and particles beginning in Greek with π (ΠΟΣ, ΠΗ, ΠΟΝ, whence ποῦ, πόθεν, πότερος, &c.), in Sanscrit with *k* (*kas*, *kā*, *kim*, &c.), and in Latin with *qu*, equivalent to *x* *. We are inclined to add to these examples the Sanscrit root *krī*, 'to purchase,' which in our opinion is the Greek *πρίαμαι*: but this, we perceive, is considered doubtful by Mr. Pott, (p. 201.) The Greek λύκος has preserved the *k* of the Sanscrit *vrika* (a wolf), which in Latin has become *p* (*lupus*).

Some singular transitions are observable with regard to the Sanscrit compound consonant *ksh*, and its etymological equivalents in cognate languages. The number of words where a Greek or Latin radical ξ, *x*, appears as the representative of *ksh*, (e. g. δεξιός, δεξιτέρος, *dexter*, = Sanscrit *dakshina*, 'right'; ξυρόν = Sanscrit *kshura*, 'a razor'; ἄξων, ἄμξα, *axis*, = Sanscrit *aksha*, 'a waggon, a cart') is comparatively small. In several instances the *k* has been preserved, but the *sh* has passed over into τ, *t*: as in the Sanscrit verb *kshinómi* (root *kshi*, 'to destroy,') which is the same as the Greek κτίννυμι, κτείνω; in *kshiyāmi* (root *kshi*, 'to dwell') which answers to the Greek κτίζω, whence κτίστης; in *tukshami* (root *tuksh*, 'to make, to fabricate,') preserved in the Greek τέκτων; in *rikshū*, 'a bear,' ἄρκτος; or in *vakshas*, 'breast,' (from the root *vah*, 'to carry,') which seems to be the Latin *pectus*. Mr. Pott expresses his belief that *sh*, when immediately preceded by another consonant, had never changed into *r*: if the suggestion, thrown out in a former Number of this Journal, of an etymological connexion between *crepusculum* and the Sanscrit *kshapā*, 'night,' between *crus* and the Sanscrit *kshura*, 'hoof of an animal,' and between *κραιπνός* and the Sanscrit *kshipra*, 'swift, quick,' be correct, Mr. Pott will see reason to modify his remark. We will merely submit a few more examples of words which we conceive to be related to each other, though in them the Sanscrit *ksh* is metamorphosed in a manner that seems unaccountable. *Kshura*, 'a hoof,' besides its connexion with the Latin *crus*, we conceive to be related also to the Greek σφυρόν, although we are at present unable to support this assumption by any other example of σφ and *ksh* corresponding to each other. The Sanscrit root *kshi*, 'to perish' (in the present of the passive,

* In Herodotus the forms ποῦ, πόθεν, &c., occur.

kshīye), besides its relations with κτείνω, seems also to be identical with φθίνω: the same transition of *ksh* into φθ we have in the Sanscrit root *kshar*, 'to perish,' as compared with the Greek φθείρω; and in *īksh*, 'to see,' and *akshi*, *aksha*, 'eye,' as represented in Greek by the words ὀπτομαι and ὀφθαλμός. Χθών may very possibly be the same word as the ancient Sanscrit *kshā*, 'earth.'

The natural representative of the Sanscrit *kh* and *gh* in Greek would be χ: e. g. *nakha*, 'nail,' = ὄνυξ, ὄνυχος, *unguis*, *ungula*; *sankha*, 'a shell,' = κόγχη, *concha*; *mēgha*, 'a cloud,' = ὀμίχλη (in Gothic *milhma*); *laghu*, 'light (not heavy),' = ἐλαχύς; *dīrgha*, 'long' = δολιχός. But frequently the aspiration of the *kh* is lost, as in *khara*, 'an ass' = κίλλος; root *khan*, 'to dig,' = KEN, in κέντρον. The transition from *gh* to θ is remarkable in θέρος, θερμός, &c. as compared with the Sanscrit *gharma*, 'heat.' The latter word must have sprung from the root *ghrī*, (on the same principle as *dharma* from *dhrī*.) which does not appear to have been much used in Sanscrit as a verb, but to which, in the list of roots prepared by the Pundits, the sense of 'to glow, to shine,' is attributed.

The Sanscrit *g* is generally represented by γ and g in Greek and Latin, e. g. *agni*, 'fire' = *ignis*; root *gras*, 'to eat' = ΓΡΑΩ (ἔγραε, Callimach. Fragm. 200; Etym. M. v. γράσων) and the Gothic *gredags*, 'hungry' (greedy); *grihñāmi*, 'I seize, I take' (ancient form of the root *grah*), connected with γρίπος or γρίφος and γριπεύς, and the Gothic *greipan*, 'to seize.' In a few instances *g* has passed into β; e. g. root *gā*, 'to go' = ΒΑ, βαίνω; *gō*, *gau*, 'a cow' = βόως, *bos*.

The second class of Sanscrit consonants is that of the palatal letters *ch* and *j*, and their respective aspirates *ch'h* and *j'h*. Neither of these sounds seems to have existed in Greek or Latin; and accordingly we must expect to find their places occupied by different letters in such words as are common to either of these languages with the Sanscrit. *Ch* has often passed over in Latin into *q*, and in Greek into π or τ: e. g.

Sanscrit, *chatur*, 'four.' Lat. *quatuor*. Gr. τέσσαρες, τέτταρες.

Doric, τέτορες. Æolic, πίσυρες, πέσυρες.

S. *panchan*, 'five,' *quinque*, πέντε, πέμπε.

S. root, *vach*, 'to call, to speak,' *voco*, ἔπος with the digamma.*

S. root, *pach*, 'to cook,' *coquo*, πέπτω.

S. *cha*, 'and,' -que, τε.

S. *paschāt*, †. Lat. *post*.

* Also βάζεις, βάζμα containing the same root as βάζω, 'to speak.'

† *Paschāt* seems to be the ablative case of an adjective become obsolete in the

The number of words in which *chh*, the aspirate of the preceding letter, occurs, is smaller. Mr. Pott has noticed,

S. *chhāyā*, 'shadow,' σκιά, σκοά.

S. *chhid*, 'to split, to divide,' ΣΧΙΔ, σχίζω, scindo.

S. *richh*, 'to go,' ἔρχομαι.

S. *prachh*, 'to ask.' Lat. *precari*. Got. *frachnan*, 'to ask.'

Words with *j* are more frequent; we find,

S. root, *jan*, 'to beget, to produce;' in Greek ΓΕΝ, γίγνομαι; in Latin *gen*, *gigno*, and a number of words that have sprung from them. The Gothic *keinan*, 'to shoot,' (said of a plant) seems to be of the same stock.

S. root, *janā*, 'to know;' in Greek ΓΝΩ, γινώσκω; in Latin *nosco*, *co-gnosco*, each the central part of an extensive family of words.

S. root, *jrī*, 'to grow old, to wear out,' not represented in Greek by a primitive verb, but in derivative words such as γέρων and γήρας.

S. *jānu*, 'knee,' γόνυ, γούνα, genu.

S. *aja*, 'a goat,' perhaps the Greek αἴξ.

S. *rajata*, 'silver,' ἄργυρος, argentum.

The class of letters commonly distinguished by the appellation of cerebral or lingual consonants is even in Sanscrit of rare occurrence (*ṭ*, *ṭh*, *ḍ*, *ḍh*, and *ṇ*, pronounced by applying the tip of the tongue to the upper part of the mouth, near the root of the teeth); and very few of the words in which any of them are employed, are found in the cognate languages. Mr. Pott mentions,

S. *ashtan*, 'eight,' ὀκτώ, ὀγδοός; Lat. *octo*.

S. *nīda*, 'a nest;' Lat. *nidus*.

S. *mani*, 'a gem, a pearl;' explains the Latin *monile*, 'a string of pearls.'

The letters of the dental class, the common *t* and *d*, with their aspirates, and *n*, are very extensively used in Sanscrit, and have for the most part been preserved unchanged in such words as are common to the Greek and Latin with the Sanscrit. We subjoin a few examples:

S. root, *trīp*, 'to satiate, to satisfy,' τέρω, τέρωμαι.

S. root, *tap*; Lat. *tepere*, *tepidus*; Gr. τέφρα, and ΤΑΦ, θάπτω, (burning of dead bodies.)

S. root, *trī*, 'to cross, to pass over;' preserved in the Latin *trans*,

common Sanscrit, but of which Pānini (5. 3. 33.) has preserved two other forms, likewise used adverbially, *paścha* and *paśchā*. The adjective seems to have been formed by means of the suffix *sha* (the same which we perceive in *uchcha*, from *ut*, and *nisha* from *ni*), subjoined to *par* (*pas*), the reduced crude form of *para*, analogous to *adhar* (*adhas*), from *adhara*, in *adhastāt*, and to *avar* (*av*), from *avara*, in *avastāt*. See Pānini, 5. 3. 39 and 40.

intrare, ter-minus, &c.; in the Greek *τέρμα, τερμόνιος, ὑτέρμων, &c.*

S. root, *vrít*, 'to turn'; Lat. *vertere* and *versari*.

S. root, *tan*, 'to stretch,' *τείνω, τάννυμαι*.

In some instances the Sanscrit *t* has in Greek become *σ*;

e. g.

S. *twam*, 'thou,' *σύ* (Doric *τύ*.)

S. *chatur*, 'four,' *τέσσαρες* (*τέτταρες*.)

S. *pati*, 'master, husband,' *πόσις*.

The Sanscrit *th* has in Greek and Latin usually lost its aspiration; e. g.

S. *asthi*, 'a bone,' *ὀστέον*.

S. *prīthu*, 'broad,' *πλατύς*.

S. *ratha*, 'a chariot,' *ροτά*.

The aspiration is retained in words such as *δηδά, ὀλίγινθα, μίνυνθα*, in the termination of which we perceive the same affix *thá*, by means of which in Sanscrit some pronominal adverbs (*yathá, tathá*) are formed.

Examples of words with *d*, which has been kept unchanged, are very frequent, and we select the following few specimens out of a large number:

S. root, *ad*, 'to eat,' *ἔδω*; Lat. *edo*. From the Sanscrit root are derived the words *dat* and *danta*, 'tooth,' which seem to be corruptions of the present participle *adat*, acc. *adantam*; compare *όδοῦς* and the Latin *dens*.

S. root, *dam*, 'to subdue,' *δαμάω*; Lat. *domare*.

S. root, *dā*, 'to give,' *ΔΩ, δίδωμι*; Lat. *do*.

S. root, *dā*, 'to cut,' *δαίρμαι*, whence *δαίς, εἶση, δαιτρόν*, and *δαίνυμι*.

S. root, *sad*, 'to sit,' Lat. *sedere*; Greek, *ΕΔ, ἕζομαι*.

Mr. Pott makes some interesting remarks on a family of words, of which, in Sanscrit, *dyu* may be considered as the primitive element, and every one of which denotes some object of which *light, brightness, or clearness* are essential characteristics: e. g. *dyu, diva, divan, divasa*, 'day;' *dyu* and *diva* also signify 'heaven;' the verb *dyut*, 'to shine.' The word *diva*, 'a God, a Deity,' belongs to this family of words, and its primary meaning seems to have been 'a bright or effulgent being.' Mr. Pott has traced this original notion of the word in the names of several deities of the ancient Greek and Roman mythology: especially in *ΔΙ, ΔΙΦ, ΔΙΟΣ*; in *Ζεὺς* (*Σδεὺς* or *Δεὺς*) and *ΖΗΝ*; in *Ιώωνη, Diana, Janus, (matutine pater, Horat. Sat. ii. 6, 20,) Jupiter, Vejovis, Juno, Dis, and Deus*. To this list we would add *Θεία*, the name of an ancient goddess of light, the wife of Hyperion, and the mother of *Holios, Selene, and Eos*, (Hesiod. Theog. 371.) She is

called *Εὐρυφάεσσα* in the Homeric hymn to the sun, an epithet apparently of similar import with the name *Θαία* itself. (Compare the beginning of Pindar's fourth Isthmian ode.) Another Greek name, which we think might be explained on the same principle, is *πανδείη*, (also written *πάνδια* and *πανδία*), according to the Homeric hymn in *Lunam*, v. 15, a daughter of Selene and Zeus; but according to the Etym. Magm. a name of Selene herself. The meaning of the name in our opinion is 'the all-bright, or perfectly luminous one.'

Among words that have a radical *dh* in Sanscrit, we observe the following that have cognate words in Greek or Latin:—

S. root, *dhd*, 'to put' (present *dadhāmi*), *ΘΗ*, *τίθημι*.

S. root, *dhāv*, 'to run,' *ῥέω* (*ΘΕΩ*).

S. root, *bandh*, 'to bind,' perhaps connected with the Greek *πείσμα*.

S. root, *budh*, 'to think;' *ΠΥΘ*, *πυνθάνομαι*; Latin, *putare*.

The number of words with *n*, which has generally been preserved unaltered in all the cognate languages, is also considerable. The following may serve as specimens:—

S. root, *man*, 'to think;' *MEN*, *μέμονα*, *μέμνημαι*; Lat. *memini*.

S. *nr̥*, 'a man,' *άνήρ*.

S. *nau*, 'a ship,' *ναῦς*; Latin, *navis*.

S. root, *nas*, 'to die,' Latin, *necare*, *necis*, *perniciēs*, &c.; in Greek, *NEK*, in *νέκυσ*, and *νεκρός*.

We might, according to the plan which we have hitherto followed, go through the remaining portion of Mr. Pott's etymological remarks on the Sanscrit alphabet; but our article has already exceeded the limits within which we intended to confine ourselves. We are therefore obliged now to take leave of Mr. Pott, hoping that we may soon have occasion to meet him again in a field of inquiries to which he has devoted so much talent and zeal.

MISCELLANEOUS.

FOREIGN.

FRANCE.

M. Dupuytren's Bequest.—We mentioned in a previous Number the noble bequest to society at large, which will render Dupuytren's name for ever dear to his fellow countrymen; and we are glad to observe, from a report of the Minister of Public Instruction to the King, that a speedy effect has been given to this bequest. It may be useful in more points than one to lay the whole of the report before the reader. "Paris, the 20th July, 1835. The system of instruction, in the medical faculty of Paris, though improved by the creation of various professorships successively, is not however in many respects on a level with the state of actual knowledge. For instance, the study of Anatomy, which is the foundation of all surgical science, requires very important extension; and the decree which I have the honour of soliciting at your Majesty's hands is for the purpose of introducing an improvement of this description into the medical faculty of Paris. The more enlightened have long felt the inadequacy of a system of instruction, the sole object of which was the study of the organs in their normal state. The several variations in colour, volume, texture, &c. which these organs assume in consequence of the diseases which attack them, that which in fact constitutes pathological anatomy, is not taught in a special manner in this faculty. M. Dupuytren, struck with the importance of this omission and alive to the necessity of remedying it, was anxious, in his dying hours, to render this last service to that science, on which he has conferred, and from which he has himself derived, so much light and reputation: by a testamentary appropriation, he has bequeathed to the medical faculty of Paris a sum of two hundred thousand francs (about 8000*l.*) with the view of establishing a professorship of pathological anatomy, and your Majesty has sanctioned the acceptance of this bequest by a decree of the 5th instant. I now propose to your Majesty to carry this intention into effect, by instituting the special chair of pathological anatomy in the medical faculty of Paris which M. Dupuytren desired, and for which he has founded an endowment. This is the express purpose of the decree which I have the honour of laying before your Majesty. I am," &c. signed "Guizot." (The decree bears date the 20th July, 1835, and simply authorises the establishment of the chair in question.)

Infant Schools or Asylums.—There are nineteen of these asylums open in Paris; others have been established in Lyons, Rouen, Nîmes, Strasburg, Amiens, &c.; and measures are taking to extend them to towns of the second and third classes.

Diffusion of Education.—In the early part of the year 1831, the number of pupils in the department of the 'Seine and Oise' did not exceed 31,855; at the present moment it amounts to 43,943. Instead of 671 schools, the department now contains 860. Two hundred and fifty-six districts (*communes*) have built, repaired, or purchased houses for schools, and 20,406*l.* (510,177 francs) have been expended for the purpose. There are 120 pupils in the Normal School at Versailles. Sound systems of instruction have been universally adopted, and in most parts the plan of simultaneous instruction has superseded the old methods. The allowances to district masters and teachers amount to 19,400*l.* (485,000 francs.) We have this year had 138 classes of adults for evening tuition, and 4103 such adults have received instruction. The number of asylums for infants does not yet exceed 13; the numbers attending them are 1036; but the benefit of these establishments is universally appreciated, and they will shortly become more numerous. These details apply exclusively to the department of the Seine and Oise.)

CORNEILLE.—The King has placed a sum of 2000 francs (80*l.*) at the disposal of the French Academy, for the purpose of its being distributed among the poor descendants of this illustrious tragic poet.

• *Education in Arrear.*—For the whole department of the Finis-terre the number of pupils attending the Primary Schools (*écoles primaires*) is in the proportion of fifteen to every 100 children, or, in other words, about one child in every seven. The proportion of boys to girls attending the schools is twenty-two to eight. During the summer months the whole number of pupils falls off one third.

Journals.—The number of public journals published in France is said to be 258, which gives an average of three to each of the eighty-six departments. Three of these departments, the 'Upper' and the 'Lower Alps' and the 'Eastern Pyrenees,' as well as 192 Communes, possess on local journal. Deducting from the whole number 105 which are exclusively devoted to local intelligence, proceedings at law, literary matters, &c., the number of purely political journals is reduced to 153. The following departments, next to that of the Seine, have the largest proportion of public prints:—The 'Lower Seine,' capital Rouen, sixteen; the 'North,' capital Lille, 15; the 'Pas de Calais,' capital Arras, nine; the 'Mouths of the Rhone,' capital Marseilles, seven; the 'Calvados,' capital Caën, seven; the 'Lower Loire,' capital Nantes, six; the 'Gironde,'

capital Bordeaux, five; and the 'Rhône,' capital Lyons, five. The attempts made to establish provincial reviews in Normandy have failed.

HOLLAND. *note 1812/15*

The total number of students attending the three universities of Leyden, Utrecht, and Groningen, was in 1832, 1568; and in 1833, 1622. Leyden was better attended than the others in both years. The number of pupils attending the several Gymnasia in the kingdom was 1295 in 1832 and 1225 in 1833. The number of parochial schools open in 1833 was 2872. *note*

BELGIUM.

BRUSSELS.—The school for indigent males in this town is already attended by 207 individuals, among whom there are fourteen above forty-five years of age, and two above fifty-five; in this way a grandfather, father, and grandson come to receive the benefit of instruction on the same bench. Nothing had before been done for the female poor; a school has now, however, been opened for them and is attended by upwards of 100 of that class.

The town-council have unanimously resolved to appropriate an annual sum of 1200*l.* (30,000 francs) in support of the free university just established in this place.

SWITZERLAND.

Scholastic Evenings.—These very useful meetings are spreading through the canton of Bern, and there are no less than twenty districts in that canton which have adopted them. The young men assemble every evening, and employ themselves in studying the geography and history of their native country, under the guidance of well-informed individuals. In proportion as the pupil advances in knowledge the sphere of his studies is enlarged. In some places, such as Sanen, Arch, Leuzigen, and Neuville, singing, arithmetic, and grammar are taught. In others, the elements of natural history and experimental philosophy form an addition to the preceding branches.

BASLE.—The university, under its new organisation, will have four professorships of medicine, nine of philosophy, three of divinity, and two of law. The cost of its maintenance will be about 2300*l.*, of which the government will bear three-fourths; the remaining fourth will be provided for out of the funds of the university itself.

ZÜRICH.—An addition of 3000 Swiss francs (about 187*l.*) has been made by the great council to the yearly grant in support of the university in this town. The total amount of the salaries paid to the professors is 1375*l.* (22,000 Swiss francs); namely, for those in the faculty of Theology, 250*l.*; in that of Political Economy and Administrative Science, 320*l.*; in that of Medicine, 450*l.*; and in that

of Philosophy, 355l. The number of students from the town population, as compared with those from the rural districts, is in the proportion of one to two.

The Press.—Great activity has manifested itself of late years in this department. Between the years 1817 and 1830 the number of printing presses in Switzerland increased from fifty-four to seventy-one, and that of periodical journals from sixteen to twenty-nine; between the years 1830 and 1834, the presses had further increased from seventy-one to ninety-three, and the journals from twenty-nine to fifty-four. The only cantons which possessed no journals of any kind in 1830 were Uri, Unterwalden, and the Valais; and at that time Unterwalden was without a single press.

AUSTRIA.

The Emperor's Technical Collections.—These valuable collections are the private property of the present sovereign, who has spent the last sixteen years in forming them. They consist of three distinct divisions: the 'collection of natural productions,' amounting to about 3500 specimens; the 'collection of manufactured articles,' about 40,000 in number; and the 'models,' containing about 150 specimens of machines of all kinds, got up with great care and elegance. They have all been removed from the Emperor's former residence to the apartments which he now occupies.

GALICIA.—A statistical survey of this part of the Austrian dominions, drawn up by M. Galinski and dedicated to the Archduke Ferdinand, governor of Galicia, was published at Lemberg, in January last. According to this statement, Galicia contains an area of 32,950 square miles, on which there are ninety-five towns, seventy-five distinct suburbs, 194 market towns, and 6054 villages; the total number of houses is 659,406, and of inhabitants 4,376,744; of these 247,196 are Jews. The principal towns are Lemberg, 48,731 souls; Brody, 16,623; Tarnopol, 11,744; Przemyśl, 7818; Yaroslaf, 7026; and Wielicza, 6246. The Sclavonian inhabitants of Galicia are composed of three separate races: the Pole, who occupies the tract between the north-western parts of Austrian Silesia and the river San, and goes by the name of *Gōral* in the mountainous regions, and of *Mazur* in the low country: of this race the numbers are 1,800,000; farther eastward are the Rusniaks or Russines, who inhabit what was formerly called Red Russia, and are likewise about 1,800,000 in number; and the Wallachians or Walaŕks, who live in the ancient Buckowine, and amount to about 150,000 souls.

HUNGARY.—The principal journals which circulate in this country are German; no periodical paper is published in the Sclavonian language, although the majority of the inhabitants, a decided minority, however, with regard to intelligence, are Sclavonians. There are

three papers in the Magyar tongue, but the best of the three has never had above 700 subscribers.

THE TYROL.—No branch of public duty could be more neglected in this part of the Austrian dominions than that of education about seventy years ago; but the exertions made by the provincial administration and the clergy ever since the year 1767 have produced a far better state of things. There is no parish at present without a national school, similar in organization to those that have been established in other provinces: these schools are composed of 735 rural and 59 girls' schools, besides a model-school at Innsbruck; 6 head schools of districts at Schwatz, Brixen, Botzen, Trent, Roveredo, and Bregenz; and 4 head schools at Hall, Lintz, Meran, and Feldkirch. Of the higher description of schools, called Gymnasia, there are 8; namely, at Innsbruck, Botzen, Brixen, Feldkirch, Hall, Meran, Roveredo, and Trent; and the number of pupils attending them is between 1200 and 1300. There is an establishment for philosophical studies, and an ecclesiastical seminary, at Trent; a school for theological studies and an episcopal seminary at Brixen; and a university, instituted by Leopold I., in 1672, but dissolved subsequently, and restored in 1825, at Innsbruck. This university possesses ample means, both in libraries and scientific collections.

PRUSSIA.

The last moments of the late Rev. Dr. Schleiermacher.—During the whole of his last illness (which terminated fatally in February, 1834) his mind remained clear, his manner was calm and collected, and his submissiveness to every arrangement most punctilious; not a word of complaint or murmur escaped his lips; he bore himself with patience, and was friendly to all and at all moments, though an air of seriousness and of deep thoughtfulness was constantly spread over his features. One day, waking out of a slumber induced by opium, he called his beloved wife to his side, and observed, 'I am in a state which wavers between consciousness and insensibility, but internally I experience inexpressible ecstasy; my mind is occupied with the deepest speculations, mingled however with religious feelings of the most glowing fervour.' His last days and hours, indeed, were illumined with the holiest of religious influences: even his dreams were the reflection of his Christian bearing through life. 'How delightful a dream have I had!' he one day exclaimed, 'and it has left an unusually beneficent impression behind it. I thought that I was in a large circle, filled with acquaintances and strangers; they were all intent upon me; they all desired to hear me converse on religious things; it was as if I was giving them a lecture; and I was so delighted to give it!' His thoughts were replete with love towards his children and friends; and the nearer his end approached, the more did the fervency of his affection display itself; it was the in-dwelling breath

of his life. 'Children,' said he, 'I bequeath to you the counsel of St. John, "Love one another;" and I charge you,' he added, turning to his wife, 'to bear my farewell to all my friends, and to tell them how heartfelt was the love I bore them.' He knew that his last moments were drawing near; he was anxious to have been spared to his own yet a little longer; and he was conscious that he had many struggles to endure before he passed into eternity: yet he was wholly resigned to the dispensation of eternal love, and looked forward to the hour of his closing conflict with a courageous heart. The last morning of his life brought a great increase of bodily suffering with it: he complained of burning heat inside, and for the first and last time throughout his protracted pains a murmur escaped his lips, 'Gracious Father, I suffer grievously!' And he then turned to his family, who were standing round his bed, and said to them, with a deep thrilling accent, 'My dear children, leave me—leave me! I would not you should witness this scene of anguish.' The hand of death was upon his features; his eye seemed dim; he had wrestled with death. He now raised his forefinger upwards to his left eye, as was his custom when absorbed in thought, and opened his lips, saying, 'The expiatory death of Christ, and his body and his blood are ours.' He had, in the meanwhile, raised himself up in his bed; his features began to light up again; his voice grew clear and strong, and he asked us, in a tone of ministerial solemnity, 'Do you all hold to this faith as I do?' and all around loudly testified that they held the same faith, saying, 'We do.' Then, said he, 'let us partake of the Holy Sacrament! But there is no time to call in an officiant. Be quick! be quick! Let none of you be offended for the form's sake.' After the vessels had been brought in, his family in the interval standing in solemn silence round him, and his eyes and whole countenance gradually brightening with increasing animation—indeed, a glow of more than mortal kindness, a splendour such as never shone upon them before, and such as no expression can describe, beamed from those eyes and that countenance as he cast them round upon his beloved ones—he began to pray, and exhort us briefly in terms befitting the occasion. He delivered the bread and wine to each of us separately, pronouncing the prayers that accompany the taking of the bread and wine distinctly and audibly; and then he administered them to himself, saying, 'On these words of Holy Scripture I place my assured trust; they are the corner-stone of my faith.' Having pronounced the blessing, he turned his eyes on his wife with an expression of inmost love, and gazed upon each of his children with a look of unutterable sympathy, adding, 'In this love and communion of souls, then, we are and shall be one and undivided.' He laid his head back upon his pillow; a heavenly smile beamed across his features. After a few minutes, he gently exclaimed, 'My spirit can no longer abide with you on earth.' He spoke once more, and requested we would change his position; we laid him upon his side; he drew a few breaths more, and his eyelids closed on the things of this world.

[These details were drawn up by Dr. Schleiermacher's widow, assisted by an eye-witness.]

Periodical Literature. The number of newspapers and journals of all descriptions which issue from the Prussian press, is estimated at 300, as many as are published in this country or France. Of these 300, 55 belong to the Rhenish provinces. Quetelet's comparative estimate of the produce of the several towns in Europe, would make it appear that the *maximum* of periodical publications belongs to Leipzig, Jena, and Weimar, and the *minimum* to Rome and Madrid.

KÖNIGSBERG.—The following subject for a prize essay has been announced by the heads of this University:—'*Statistica (quæstio) de ratione, qua in civitatibus Americæ Septentrionalis liberis, in Britannia et Gallia cives publice repræsentantur, et quid uniuscujusque earum civitatum forma repræsentativa, si ad causas revocetur, proprium et peculiare habeat.*'

GERMANY.

Schools.—In the course of our reports of the progress of education in Germany, we have had repeated occasion to speak of three distinct descriptions of schools which exist in that country. In order that their respective characters may be more completely understood, we take this opportunity of laying before our readers what may be considered as a general outline of the studies pursued in those schools, and the hours respectively devoted to them.

1. *Gymnasium.*

● Subjects of Study.	Hours per Week.					
	Class VI.	Class V.	Class IV.	Class III.	Class II.	Class I.
Greek . . .	—	4	4	4	4	4
Latin . . .	10	10	8	8	8	8
French . . .	3	3	3	3	3	3
German . . .	3	3	3	2	2	2
Religious Knowledge	2	2	2	2	2	2
History . . .	2	2	2	2	2	2
Mathematics . . .	3	3	3	4	4	4
Archæology . . .	—	—	—	—	2	2
Geography . . .	2	2	2	2	1	1
Natural History . .	2	2	2	2	1	1
Drawing . . .	2	2	2	2	3	2
Singing . . .	1	1	1	1	1	1
Writing . . .	2	2	2	2	—	—
	32	36	34	34	33	32

With respect to the subjects of study and the time devoted to them, it should be observed, that variations and omissions occur according

to the directions of the Boards of Education or other specially-appointed public authorities, or at the option of the heads of Gymnasias. The same remark applies to the other two kinds of schools.

2. The *Real Schule* (school of practical knowledge.)

3. The *Volks Schule* (school for the people.)

Hours per Week.	Hours per Week.
Subjects of Study.	Subjects of Study.
Religious Knowledge	Religious Knowledge
Mathematics .	German
Natural History	Arithmetic
Geography	Drawing
History .	Natural History
German	Geography
French .	History .
English .	Singing .
Singing .	
Drawing	
Writing	

31|35|35|33

20|23|27|28

Further information will be found in the notices headed "Hesse-Cassel" and "Hesse-Darmstadt."

HANOVER.—A better state of things has begun in the national schools in his Majesty's Hanoverian dominions. Many of the masters have been hitherto compelled to instruct their pupils in the houses of private individuals in the absence of any other accommodation; but the Royal Consistory have now determined that a proper school-house, or at least a distinct school-room, shall be built or hired for the purpose. The Consistory have also promulgated the following order, placing the attendance in these schools on the same footing as in many other German states:—"Whereas it has been represented to us, that in many places where schools are established, parents do not send their children regularly to school, we therefore direct the Royal Ecclesiastical Boards (*Kirchen Commissionen*), &c., to move the royal ministry of ecclesiastical affairs and education, that the subsequent regulations be read from the pulpit by all ministers for two Sundays following, that they be made known to school-districts, and that they be punctually complied with:—

"1. From Michaelmas to Easter, every child, fit for instruction, is to be sent to school on each week-day from eight to eleven o'clock, or from nine to twelve o'clock, in the forenoon, and from one to four, or twelve to three o'clock, in the afternoon.

"2. From Easter to Michaelmas the school is to be attended by the less aged children, viz. such as have not attained their tenth

year, for four hours on the week-days; but by elder children either as often and as long as the younger children, or for four hours on two week-days and two hours on the Sunday afternoons; or if they are serving for hire, they are to attend school during the two hours on the Sunday afternoons.

"3. If any child, who cannot assign a satisfactory reason, shall be absent a whole day from school, a penalty of four pfennige (about $\frac{1}{4}d.$) is to be inflicted.

"4. A report of all the absences from school is to be delivered by the master at the end of every quarter to the minister under whose superintendence he acts, and to be laid by the minister before the proper authorities, in order that the penalties may be rigidly enforced.

"5. The amount of such penalties is to be applied to the purchase of good school-books, and the payment of the school-fees, for the children of notoriously indigent parents."

A society, under the name of the "Historical Society for Lower Saxony," has recently been formed in the Hanoverian capital, under the immediate patronage of his Royal Highness the Duke of Cambridge. Its first object is to collect materials towards the history of the countries between the Elbe and Weser, and to set such investigations on foot as may contribute to its accomplishment.

The late Dr. Sonne, in the 5th part of his "Description of the Kingdom of Hanover," which was published last year, states its area to be 14,385 square miles, and its population 1,650,000 souls. The area is rather more than that of the seven English counties or divisions of counties, Lincoln, West and North Ridings of Yorkshire, Devon, Norfolk, Northumberland, and Huntingdon, the surface of which is 14,331 square miles, and the population of which, in 1831, was 2,664,360 souls, or very nearly one million more than the population of the kingdom of Hanover.

HESSE-CASSEL.—The Minister of the Home Department has completed his arrangements for the re-organization of the public schools. They are six in number, and are established in Cassel, Hanau, Fulda, Marburg, Rinteln, and Hersfeld. These institutions are supported by special endowments, school-fees, and grants from the public purse; these grants have been raised by the Legislature to a sum total of 25,160 dollars, or about 3560*l.* The remuneration to the masters employed in the six schools has been fixed, with a view to their being considered in future as under the special protection of the state. The yearly salaries allowed to the directors vary from 113*l.* (800 dollars) to 169*l.* (1200 dollars); those to the head masters, from about 70*l.* (500 dollars) to 113*l.* (800 dollars); and those to the under masters, from about 35*l.* (250 dollars) to 56*l.* (400 dollars).

LEIPZIG.—The number of professors in ordinary at this university is at present 34; viz., 6 in the faculty of theology, 5 in that of law, 10 in that of medicine, and 13 in that of philosophy; and the total

amount of their salaries is 32,410 dollars (about 4725*l.*), independently of certain small fees and minor emoluments.

BADEN.—The Jews of this Grand Duchy, who amount to about 20,000 individuals, and are scattered over 130 parishes, possess 34 popular schools for the instruction of their less affluent brethren. The masters of these schools receive salaries varying from 14*l.* to 45*l.* a year. With the exception of some few establishments which support themselves out of former endowments, they are wholly maintained by the Jewish community itself, and in some cases not without considerable exertion. Their state is in general highly satisfactory. The number of students during the present summer session is officially reported to be 407.

BADEN NATIONAL SCHOOLS.—The following regulations are the result of the late discussions in the legislature. Where the number of pupils exceeds 120, a second teacher is to be appointed; where it exceeds 240, a third; and so on, for every additional 120 pupils, an additional teacher. Where two or three teachers are necessary, only one of them is to be appointed as assistant-teacher; but where four or more are required, two assistants are to be appointed, and no more, the rest being head-teachers. The amount of their remuneration is made to depend upon the class under which the district falls. Of these classes there are four, the first containing districts not exceeding 500 in population; the second, places above 500 and not exceeding 1500; the third, districts above 1500, and towns exceeding 1500 and not exceeding 3000; and the fourth, towns exceeding 3000. The lowest salary paid to a head-teacher of the first class, besides lodging and school-fees, to be 150 florins (14*l.*); that of a head-teacher of the second class, 170 florins (rather below 16*l.*); of the third class, 270 florins (25*l.* 4*s.*); and of the fourth class, 400 florins (about 37*l.* 6*s.*) If a school require at least three head-teachers, the principal teacher is to receive 40 florins in addition, and where four or more are requisite, the principal teacher is to receive 60 florins, and the next to him 40 florins in addition. An assistant-teacher is to receive 50 florins a year (about 4*l.* 16*s.*), besides lodging, board, washing, and candles; or in places of the first or second class, 85 florins (rather less than 8*l.*); in the third class he is to receive 100 florins (about 9*l.* 7*s.*); and if in any of the four larger towns, Karlsruhe, Mannheim, Heidelberg, and Freiburg, 120 florins (or about 11*l.* 4*s.*) All are entitled to lodging, board, washing, and candles, or an equivalent for them..

WURTEMBERG NATIONAL SCHOOLS.—Every spot having a congregation of its own is bound, under the new law, to establish one or more schools; and every spot having more than 50 families in it, even though it form part of a parish, must open a school, unless it be united to another district where there is one; but such union cannot be allowed if the distance from the one to the other exceeds a mile. No teacher is to undertake the instruction of more than 90

pupils. If the number exceed 90, there must be two teachers; if it exceed 130, three; and if it exceed 270, four.

SAXONY.—The total number of children attending the national schools is 274,305; the population of the kingdom is about 1,500,000. In the twelve Gymnasias and Lyceas, there are 80 head-teachers, 44 sub-teachers, and 1613 pupils.

HESSE DARMSTADT.—The following paragraphs occur in the 'Plan of Studies' lately promulgated for the Gymnasias in this grand duchy:—**I.** The principle, according to which the relative importance of the several branches of study is to be determined, cannot be entirely of a classical, or entirely of a practical (realistisches) description. **II.** The subjects of study, which, according to this principle, are to be adopted in the Gymnasias of this grand duchy, are, therefore, 1. *Languages*, particularly the German, the ancient languages, particularly Latin and Greek, besides Hebrew, for the benefit of those who are intended for theologians and philologists, and the chief modern languages, which are of most value with reference to literature and active life, French, Italian, and English. 2. *Sciences*, particularly religious and moral instruction, the mathematics, natural history, geography, history, philosophy, and encyclopedics. 3. *Technical Acquirements and Arts*, particularly writing, singing, and drawing. **III.** In dividing the Gymnasias into eight classes, care is to be taken that the instruction given in each has as many corresponding steps from the lowest to the highest degree of importance. No pupil can be admitted into a gymnasium until he has completed his tenth year.

MUNICH.—All the Swiss youth who were studying divinity at this university have taken their departure for Tübingen, where they intend to finish their studies. Since it has pleased the Bavarian king to will that the darkness of the middle ages should be restored in his dominions, every branch of theological science has been more or less affected by this attempt at a retrograde reform; nor have other branches of science escaped its pernicious influence. It was anxiously desired to compel the students in divinity, in number 218, to enrol themselves in the Benedictine order, which has recently been revived by his Majesty's command; but the consequence has been that a considerable number of students have quitted Munich.

DEAF AND DUMB ASYLUM AT KAMBERG, IN NASSAU.—The founder of this asylum, Baron von Schütz, is himself deaf and dumb, and passed eight years in the Deaf and Dumb Institution at Vienna. The powers of his mind, which are of no common order, were singularly expanded and matured in this institution; and upon his return to Kamberg, his native town, he undertook to educate his brother and another boy, both of whom laboured under the same affliction. Having been successful in this first essay, he became

ardently desirous of imparting his acquirements to others of his fellow-sufferers, and determined to devote the remainder of his days to this most benevolent end, by opening a seminary for their benefit. No mercenary views impelled him, for his circumstances placed him far beyond all want. The Duke of Nassau heard of his plan, was delighted with it, created him a Privy Councillor, and gave directions not only to enrol the Baron's school as a national, and not as a private institution, but to provide a suitable building for it, and to place two young men at his disposal, in order that he might qualify them to become his assistants. The asylum was opened in June, 1829, and before the close of that year, 23 pupils were admitted. The Baron was compelled to leave Kamberg, and take up his residence in Vienna, in 1826; but he did not quit the institution without having qualified Messieurs Hisgen and Deusser, his two assistants, to conduct it efficiently; and it continues to prosper under their able superintendence. We find, from this year's account of its progress, that, in the first fourteen years of its existence, 74 deaf and dumb youths have left it, after receiving their education; that three teachers are at present employed; and that the actual number of pupils amounts to 39, namely 25 boys and 13 girls, of whom 28 are natives of Nassau, and 11 are from other parts. There has been but one instance of death among them since the opening of the institution, that of a girl, who died in the course of last year.

DENMARK.

COPENHAGEN.—The city has, out of its own means, granted a sum of 90,000 dollars (about 14,600*l.*) towards erecting new buildings for the use of the university. At the close of last year the university possessed property valued at 350,000 dollars (about 56,700*l.*); but the property belonging to the academy at Soroe is still greater. The estate at Moerup, which has been hitherto appropriated as a practical school for the education of young men in the various pursuits connected with husbandry, horticulture, and the management of woods and forests, is to be let, in consequence of the want of pupils for the school.

PUBLIC SCHOOLS.—The following public schools exist at present in the Danish dominions. In the province of 'Seeland,' the metropolitan school at Copenhagen, with a rector, two upper masters, four assistants, and an inspector; a cathedral school at Rothschild, with a rector and five masters; and grammar-schools at Helsingoer, Hellebroed near Fredericsborg, Slagelse, Hertufsholm, Wordingborg, and Roenke, eight in all. In 'Fühnen,' a cathedral school at Odensee, with a rector and six masters; and a school at Nyborg, two. In 'Laland and Falster,' a cathedral school at Nykoebing, with a rector and four masters; and a school at Nas-kow, two. In 'Jütland,' a cathedral school at Aalborg, with a rector and five masters; a cathedral school at Wiborg, with a rector

and four masters ; and schools at Aarhus, Randers, Horsens, Ripen and Kolding, in all seven. In 'Iceland,' a school at Bessestad, with a lector and three masters. In 'Schleswig,' a chapter school at Schleswig, and schools at Hadersleben, Husum, and Flensburg, four in all. In 'Holstein,' a school at Glückstadt, and others in Kiel, Meldorf, Ploen, and Rendsburg, being five in all. The number of public seminaries of a superior class is, therefore, 29.

HOLSTEIN AND SCHLESWIG.—It appears from the census taken on the 1st of February last, that the duchy of Holstein, the area of which is about 3223 square miles, contained a population of 435,528 souls, and the duchy of Schleswig, with an area of about 3454 square miles, a population of 332,866. In 1803, Holstein contained 325,743, and Schleswig 231,930. From these details it appears that their united population has, during the last 32 years, received an increase of 210,721 souls ; the population of both states having increased from 557,673 to 768,394.

SWEDEN AND NORWAY.

FINNIC LITERATURE.—There have recently been published at Helsingfors a Finnic version of Anacreon's and Sappho's Odes, as well as the first tragedy in the Finnic language, entitled 'Bunulinus Murhe Kurwans : ' it is the production of Frederic Lagerwall, and is modelled upon Shakspeare's *Macbeth*. Dr. Louerat, a physician of Kayana, in his excursion through Finland, has collected a number of ancient Finnic songs and ballads, which the Literary Society of Helsingfors intend shortly to publish.

LUND.—The number of students attending this university last winter was 596, among whom there were but two foreigners. In Divinity there were 108 ; in Law, 130 ; in Medicine, 50 ; and in Philosophy, 160 : there were 148 who had not made their option for any particular faculty ; 55 studied at the expense of the crown, and 29 at that of private patrons.

RUSSIA.

ST. PETERSBURGH.—A fourth Gymnasium is about to be opened at Vassily-Ostroff, in this metropolis ; it is to be called the 'Larin Gymnasium,' in memory of Mr. Larin, a merchant, who has bequeathed a sum of 120,000 roubles (about 5500*l.*) for building it, and a further sum of 400,000 roubles (about 18,300*l.*), the interest of which is to be appropriated to gratuitously lodging and educating a certain number of pupils. The government assign a yearly sum of 31,720 roubles (about 1450*l.*), towards supporting the school, of which Dr. A. Fischer has been appointed head master.

POPULATION OF THE PRINCIPAL TOWNS.—At the close of last year the Minister of the Home Department published a 'Brief

View of the State of the Russian Towns in the year 1833,' from which we collect the subsequent information :—

	Males.	Females.	Total Population.
Petersburg . . .	291,290 .	158,845 .	450,135
Moskow . . .	205,120 .	123,140 .	328,260
Odessa . . .	31,200 .	23,800 .	55,000
Riga . . .	25,107 .	24,760 .	49,867
Kazan . . .	22,235 .	28,009 .	50,244
Kiof . . .	18,748 .	18,012 .	36,760
Vilno (Wilna) .	17,821 .	17,816 .	35,637

CHARKOFF IN THE UKRAINE.—This educational circle has a population of 7,623,000 souls, and at this time possesses a university, 7 gymnasias, 81 district schools, and 17 private schools: it contains altogether 156 establishments for education, which are attended by 10,338 pupils. The proportion of pupils to inhabitants is not, therefore, more than 1 in 729; whereas, in the territory of the Cossacks of the Don it is 1 in 247.

OLD TIMES.—The elements of constitutional liberty seem to have been diffused over this country in past ages; for instance it is laid down in a public record of the year 1571, 'That the elders, Licharew Menshyi and Jakof Gnewasheff, with the sworn-men and writers in Belosero and its districts, shall assemble at a given spot, and there, after all the people, from the princes and nobles to the peasants, are collected together, shall hear a report from the elders of offences, robbers, and thieves, and such as conceal them, &c.:' and at a much later date, it was customary in the remote regions of Siberia that the peasants, in order to maintain order and public safety, should elect elders, sworn-men, and tithing-men, whose duty it was to bring offenders before the 'Priakastshik' (an officer of the crown of noble blood), and require him to punish them. In these times the chief or prince laid no claim to examine or chastise for offences. A species of jury, too, then existed; for families, who were at variance with one another, or sick of sanguinary feuds, adopted the alternative, prevalent among them from time immemorial, of selecting twelve or even fewer umpires from among their relatives, who reconciled the disputants before the popular assembly, and decided the matter in dispute.

POPULAR PRINTS.—Wood-cutting is an art which employs whole villages in Russia; but it is of the coarsest and most uncouth description, with respect both to the skill of the artist and the subjects upon which he employs it. The prints produced, which are religious subjects, historical events, or fables, legends, and humorous conceits, find a ready sale throughout the emperor's dominions. Among others, we have seen a representation of Mount Sinai at the moment of the delivering of the tables to Moses, but so full of matter, that we must not attempt to describe it. In fact,

there is scarcely a single occurrence or character of importance in the Old Testament which is not attempted ; and, to crown the whole, we are favoured with a sun-beam, striking straight through Mount Sinai and darting upon St. Catherine's tomb. A genealogical tree of Christ, from Abraham to Joseph, gives us the portraits of forty-two of Christ's ancestors ; and in the print of the Last Judgment is an immense serpent, each of the parts of whose tail is appropriated to some one or other of all the vices of human nature ; while the birds and fishes, in accordance with Holy Writ, are disgorging themselves of the flesh of man. A 'catalogue raisonné,' and the portraiture of forty-five saints, are accompanied by a circumstantial enumeration of the number of drops of blood which the Redeemer lost for mankind's sake. In a large circular 'Map of the World,' Asia is called 'the quarter of sun-rise,' and it ends with the Happy Islands of Macaria, next to paradise. Africa is termed 'Noon,' and, in one direction, extends from Egypt to the White Sea and Atlantic ; Europe retains its proper name, and is assigned as the portion of Noah's eldest son, Japheth ; while the remaining quarter, America, 'not long ago' discovered by Spanish and French 'Niemzy,' or dumb persons, as the Russian designates all foreigners, is represented as the largest of all islands, and inhabited by a people who know no written characters, have no religion, live five hundred years and upwards, eat baked meat and nutmegs, and are subjects to the French and Spanish monarchs. The island of Malta is set down as full of teachers and wise men, herbs and vegetables, and the island of Minorca as inhabited by sages ; but the city of Moscow, with its walls and towers, steeples and churches, occupies a larger share of the print than either Asia or America. Petersburg, however, seems to have been out of the designer's good graces, for its site is designated by only seven miserable stunted firs and beeches. After all, this map is 'cunningly' devised with reference to the traditions current among an ignorant and superstitious race ; any attempt to break in upon them would be but 'cutting blocks with a razor.'

MEDICAL POLICE.—In the whole empire there are fifty-two boards of general health, and a fifty-third is about to be instituted in Bessarabia. The following establishments were under their direction in the year 1833, the date of the last returns, viz. : 146 hospitals, 29 places of education, 33 lunatic asylums, 10 invalid houses, 16 orphan asylums, 68 houses of correction and industry, 82 poor-houses, and 12 schools for the sons of employés in the Chancery.

PUBLIC LIBRARIES.—In the year 1830 the Minister of the Home Department directed that public libraries should be gradually formed in every province of the empire, for the diffusion of useful knowledge in the arts and sciences, particularly with a view to the information of mechanics and artists. An official return states that one such library has been already opened, and that orders have been forwarded to governors of provinces to establish them in

twenty-four other towns; that the university library at Kasan is to be appropriated to this purpose on certain days; that 4000 volumes have been presented by some young men to the library forming at Reval; and that a company of shareholders at Tamboff have undertaken to establish one in that place.

POLAND.

CRACOW.—The statute recently drawn up and promulgated by the three Powers, who are the Protectors of this republic, fixes the number of professors in ordinary at twenty-five, that of paid adjunct-professors at nine, and that of teachers of languages at 3. Eight professorships still continue vacant. The matriculations amounted last winter to 289, among which there were only 6 students in divinity and 47 in law. The clinical lecture in obstetrics has not yet been opened, and the school of arts has been separated from the university and combined with the technical school.

POLISH LITERATURE.—About 150 works in the Polish language appeared last year, at the beginning of which 31 journals of all kinds were published; to these some additions were afterwards made. Seven of them were of a political character: we may remark that one of them, 'The Lemberg News,' has no inconsiderable popularity on account of the 'Kozmaitosci' (miscellanies) which accompany it, and give a brief account of the novelties in Polish and Slavonian literature. The most esteemed of the penny magazines are the 'Magazyn Powszechny,' published at Warsaw, and the 'Przyjaciół Ludu' (Friend of the People), which appears at Lissa.

GREECE.

• ATHENS, 5th June.—We are in expectation that several societies will shortly be instituted, which cannot fail to be attended with great benefit to the whole kingdom when brought into active operation. The Regency have already determined on establishing a 'Botanical Society,' and the foundation of a museum of natural history has commenced under the active auspices of Dr. Wihmer, the king's body-surgeon, who is the temporary president of the Botanical Society. We are told that the formation of an 'Academy of the Arts and Sciences' is at hand, and that it is intended to connect it with a 'Society of Natural History.' The garden belonging to Mr. Blaches, which is said to be the site of the ancient Academy, is designated as the spot where the members are to meet. The Academy intend to publish two journals, the one of a scientific character, in such language as may be considered most eligible, and the other of a practical description, in Greek; the supply of publications for its use is to be provided for by subscriptions, and we understand that the elevations and plans for the proposed Academy, which have been designed by Dr. Rüser, have received the royal sanction.

GREEK INSCRIPTIONS.—The first part of a collection of inedited

Greek inscriptions has been published at Nauplia: the editor, Lewis Ross, who is attached to the government as Greek archæologist, has dedicated the work to King Otho. The fac-similes of the inscriptions are lithographed with uncommon neatness.

SCHOOLS.—The reports made to us on this subject are by no means encouraging. The school for teachers in Nauplia is, it appears, almost paralyzed for want of qualified instructors and active support; the gymnasium in that town exists as yet on paper only; and the seminary at Egina is wholly dependent upon the goodwill of some of its masters. This is a natural consequence of the inefficiency of the Board of Education, which has but one individual of talent and information in it; and this is Jakobaky Riso. A Greek school and a gymnasium are about to be opened at Athens, the new capital, and some of the teachers have been already engaged.

TURKEY.

CONSTANTINOPLE.—The government, it is said, is about to form a Polytechnic School, in imitation of that at Paris, under the roof of the College of the Icoghians at Galata-serai. There is something very striking in the pains taken by the Turks of the present day to adopt the manners and customs of their Christian neighbours, and get rid of their former habits. War has now been declared against smoking; the civil officers of the Porte have been ordered to discontinue the use of the pipe during hours of business, and none are allowed to smoke in the presence of the judges or other functionaries. Such an advance in civilization is well worthy of remark, for it is not many years ago that it was the etiquette, on all solemn occasions, to present a pipe to every person of distinction; and the omission would have been construed into an unpardonable affront. It may be recollected, too, that, at the famous treaty of Ackyerman, the Turkish deputies flew for refuge to their pipes, and made a merit of concealing the embarrassing effect which the insolent demands of the Russian negotiators produced upon them, behind a dense cloud of smoke. The Sultan has also prohibited the more affluent of his lieges from being attended by large retinues of servants, or keeping too numerous a stud.

THE EAST.

PERIODICAL LITERATURE.—The Eastern nations, living under a pure despotism, have scarcely anything deserving the name of periodical literature. The only official journal in China, the 'King Pao,' or Herald of the Metropolis, which is published daily at Peking, finds its way only occasionally among the inhabitants of the provinces, and contains nothing but government matters. In Persia a species of newspaper appears at times; in breadth it is not above two inches, nor is it many in length. Simultaneously with the attempt to introduce European institutions into Turkey, an attempt has been made to establish a public journal. An official paper, in the native and French languages, has for some

time past been published in Constantinople; it appears once a week, and is divided into two parts, one containing official information, and the other articles of novelty from foreign parts, or connected with the arts, sciences, and trade. Periodical literature has, however, taken up somewhat broader ground in Egypt. Independently of several French publications, journals in the Arabic tongue are brought out in Cairo and Alexandria: these last contain the Viceroy's decrees, regular meteorological reports, occurrences both domestic and foreign, notices of attempts to introduce any branches of European industry, articles appertaining to trade, public buildings, &c.; and the editor has even gone so far as to communicate the items of grievance brought against the governors of provinces by the local assemblies. In Greece, too, the early days of the insurrection against the Porte were signalized by the institution of a periodical press, which assumed a varied complexion, corresponding with the peculiar views of the different domestic parties. A short time ago, the proprietors, being called upon to give security, every political paper was brought to an end. A journal, entitled the 'Sotir,' or Saviour, at present makes its appearance in Nauplia: it is printed in Greek and French, but, we believe, no longer advocates the cause of the government; when it did, its tendency was counteracted by a decided opposition paper.

EGYPT.—A letter from Clot-Bey, in Cairo, to M. Jomard, says, 'I have just obtained the establishment of an amphitheatre in the very mosque of Moristan. We have a skeleton, and Dr. Auzoux' anatomical models for the use of the pupils. Here, then, we have the science of anatomy joining in fellowship with a form of religion which has been hitherto its great enemy! Is not this a step in civilization? For some time past, exertions have been making to embellish the principal streets; they are all now hung with myriads of lamps.' Another letter to the same individual, from Refah, who, like Clot-Bey, was educated partly in France, observes, 'I have translated the first volumes of Malte Brun's "History of Geography," which is in the press, and I am making progress with the second. My pupils in the Normal School have been appointed professors in his Highness's elementary schools. * * * Globes and geographical charts have been introduced into all the schools, and our pupils begin to believe that the world actually turns round. I am in confident hopes that a special school for translators of French and Arabic, and a school of arts and trades, will be established in the palace of the Destadar-Bey.'

ALGIERS.—The Municipal Council of this town having voted a sum for establishing more advanced courses of instruction, an institution has consequently been opened, in which classical education, corresponding with that given in the Royal colleges in France, and calculated to enable students to go through the examination for a bachelor of arts' degree, may be obtained. Arabic is one of the

indispensable subjects of study in the new seminary. The nomination of the several professors, who are all natives of France, was made by the Count D'Erlon, Governor-General of the colony.

BAHAMA SOCIETY FOR THE DIFFUSION OF USEFUL KNOWLEDGE.—A society under this title was established at Nassau, in the Bahama islands, in April of the present year, which already numbers among its members the governor, the chief justice, and fifty-five resident members, together with several honorary members.

The objects of this society, are—

The collection of all such facts and knowledge as may be useful to the inhabitants of these islands—to be derived from the opinions and information of all persons having experience in agriculture, commerce, &c., &c., in the colony, as well as from others who may be willing to afford it; together with such selections from scientific and other publications as may be applicable to the Bahamas.

The diffusion of all such information, by means of weekly, monthly, or other periodical publications, to be distributed gratuitously to the members, and to be sold as cheaply as possible to non-subscribers.

To obtain from the various institutions of the same nature in other countries their publications; by which it is hoped a most useful, entertaining, and instructive library may be formed.

The collection of descriptions, and more especially of models and drawings of apparatus, machinery and utensils for agricultural and other purposes, which may be thought applicable to this colony, or useful or instructive to its inhabitants.

The prosecution of experiments, which, if successful, would benefit the colony.

The importation of seeds and plants likely to thrive and be profitable. To encourage the exportation of the productions and manufactures of the Bahamas, with the hope of increasing the trade, and developing more fully the resources of the colony; also, to establish a beneficial interchange of plants, seeds, &c.

The distribution of medals or prizes (should the funds admit of it) for inventions, discoveries, or information of general utility to the colony.

To establish, for general benefit, lectures on different subjects, combining instruction with amusement.

To obtain, if possible, a piece of ground for experiments, and for propagating, for future distribution, such plants, &c., as may be obtained. To establish also a small museum, for the collection and arrangement of specimens of natural history, &c., occurring in the Bahamas, for the use and information of such as might desire to be more particularly acquainted with them.

Each resident member subscribes five dollars annually, but should any one be absent more than twelve months from the colony, he is not required to pay his subscription during his absence. Strangers who may be at Nassau are to have tickets for the lectures sent them;

and members' tickets are transferrable to ladies and to youths under fourteen. The society have already commenced publishing a journal; the first number of which contains an account of the Cingalese mode of cultivating the cocoa-nut, with a notice of its various uses.

BRITISH.

UNIVERSITY INTELLIGENCE.

OXFORD, JULY 4.—The following subjects are proposed for the Chancellor's Prizes for 1836, viz. :—

For Latin Verse—*Alexander ad Indum.*•

For an English Essay—The Effects of a National Taste for general and diffusive Reading.

For a Latin Essay—*Antiquorum Romanorum in publicis operibus magnificentia.*

The first of the above subjects is intended for those gentlemen who, on the first of May next, shall not have exceeded four years; and the other two for such as shall have exceeded four, but not completed seven years, from the end of their matriculation.

Sir Roger Newdigate's Prize.—For the best composition in English verse, not limited to fifty lines, by any under-graduate who, on the day specified, shall not have exceeded four years from the time of his matriculation. Subject, 'The Knights of St. John.'

CAMBRIDGE, JUNE 20.—Sir Thomas Browne's medals were this day adjudged as follows :—

Greek Ode—James Ind Smith, Trinity College. Subject, 'Delos.'

Latin Ode—Henry Drury, Caius College. Subject, 'Belisarius.'

Epigrams—Henry Drury, Caius College. Subject,

'*Amphora cœpit*

Institui, currente rota cur urceus exit?'

JULY 2.—The following prizes were this day adjudged :—

Members' Prizes for Bachelors of Arts—Edward Thomas Vaughan, B.A., Christ's College; Thomas Bradley Paget, B.A., Trinity College. Subject, 'De fide historica recte æstimanda.'

Members' Prizes for Under-graduates—John Smith Mansfield, Trinity College; James Ind Smith, Trinity College.● Subject, 'Utrum recte judicaverit Cicero iniquissimam pacem justissimo bello anteferendam esse.'

NATIONAL SOCIETY FOR THE EDUCATION OF THE POOR.—In the twenty-fourth report of this society, recently published, an interesting survey is taken of the efforts which have been made by the society to promote education since its establishment in the year 1811. The committee have from the first looked upon their model and training institution, the central school, as the source from which improvements

in national education are to flow. Since 1812, there have been received at this school 1178 masters and mistresses at their own request ; 967 of whom were from local schools ; 953 have been provided with permanent situations ; and 682 teachers in training have been sent out for the temporary charge of schools. There are, in addition, 43 central schools in various parts of the country, where 2000 teachers, who could not conveniently come up to London, have been trained according to the system adopted by the society. The direct extension of schools has been stimulated by the society raising money, to be added in the proportion of one-fourth to local contributions, for the purpose of building school-rooms. During a period of twenty-four years 125,000*l.* have been voted in furtherance of this object, occasioning by this means an outlay in building considerably exceeding half a million of money. Out of the last parliamentary grant in aid of education, amounting to 20,000*l.*, the sum of 13,610*l.* has been assigned to the society, and distributed to 122 cases which were laid before its committee. The Lords of the Treasury (being unable to meet the whole demand which was made on their funds) adopted two principles of distribution, the first having reference to the smallness of the amount which was solicited at their hands, and the second to the extent of population from which the application came. In consequence of this restriction, 89 applications transmitted through the society, for sums amounting to 8,014*l.*, remained unsatisfied. The report states that a grant to the amount of 20,904*l.* would secure an immediate outlay of above 50,000*l.* in building school-rooms, and provide accommodation in 213 places for the accommodation of 31,375 children. In allusion to the exertions which the society is still urged to make, it is stated that there are upwards of 2000 places (consisting of the smaller parishes, separate townships, or hamlets, and extra-parochial places, with populations varying from 50 to 100 souls and upwards to a considerable amount) in which there does not exist a single school of any kind. In stating its present and prospective responsibilities, the report lays great stress upon improvements to be effected in the character of the education given to children, and on the difficulties which lie in the way of obtaining liberal means for the support of teachers. It is remarked : — ‘ The difficulty always experienced by the society has been that of providing salaries for teachers, not that of finding well-educated persons who were willing to enter into training, and devote their time to the education of the young. Such persons are never wanting where adequate salaries are provided. But, if the qualifications and abilities of teachers were to be raised by means of any system of training, without at the same time raising the remuneration they receive, it is not probable that the experiment would proportionably benefit the schools. The temptation to accept the same or a better reward for some other employment, at a more easy rate of exertion, would be constantly diminishing the number of those who had been prepared, with much expense and care, for the business of superintending schools. And this view of the subject is not merely theoretical, but it has been found to exist in practice.’ The increased re-

muneration of teachers is intimately connected with improvements in the mode of education ; and the following suggestions are thrown out as the means of bringing them up to that standard of attainment and to that station which it is plainly desirable they should hold :—1. Requiring small weekly payments for the education which is bestowed. 2. Their salaries to be increased by the addition of any small bequests and charitable endowments which may be left at the discretion of the clergy or others, without a specific appropriation to any particular use. 3. The building of a dwelling-house in the immediate neighbourhood of the school, and connecting with it a garden sufficient for the master's use.

EDUCATION RETURNS FOR ENGLAND AND WALES.—In 1833 a series of questions was addressed to the Overseers of the Poor throughout England and Wales, and by them communicated to all schoolmasters and schoolmistresses, for the purpose of obtaining particulars relative to the state of education. The following is a recapitulation of the summary of the returns which have been made.

MAINTENANCE OF SCHOOLS.	INFANT SCHOOLS.		DAILY SCHOOLS.		SUNDAY SCHOOLS.	
	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.
By Endowment	30	1,450	4,076	152,314	571	39,533
By Subscription	197	13,081	2,632	165,436	15,244	1,423,377
By Payments from Scholars . .	2,350	40,721	26,791	691,728	101	5,718
By Subscription and Payment } from Scholars (combined) . }	408	33,753	2,487	178,464	912	80,262
Totals	2,985	89,005	35,986	1,187,942	16,828	1,548,890
RELIGIOUS DISTINCTION.	—		Schools.	Scholars.		
Schools established by	{	Infant Schools . .	58	4,635	}	51,822
Dissenters		Daily Schools . .	867	47,287		
in England and Wales.		Sunday Schools . .	6,247	750,107		
—			INFANT and DAILY.		SUNDAY.	
Schools established since the year 1818, or more properly speaking, the increase of Schools since the year 1818.			Schools.	Scholars.	Schools.	Scholars.
			19,645	671,243	11,285	1,123,397
LENDING LIBRARIES of BOOKS attached to Schools in England and Wales, are . . . 2,464						

The population would amount to 14,400,000 when the inquiry was made and answered, and, at that time, the children under instruction at infant and other daily schools appear to have been 1,276,947, or nearly nine per cent. on the whole population. The children who attended the Sunday schools formed nearly eleven per cent., or 1,548,890 ; making together twenty per cent. The proportion of children from five to fifteen years of age is twenty-four per cent. of the entire population. The above returns are evidently very imperfect ; they do not, for instance, furnish the means of ascertaining the proportion of day scholars attending Sunday schools,

nor do they show to what extent the total of 2,825,837 scholars, represented as being under some course of instruction, is swelled by duplicate entries, which we know must be the case. It follows then that the per centage as deduced above must be very far from the truth.

STATE OF EDUCATION IN MANCHESTER.—Complaints having been made of the inaccuracy of the returns presented from Manchester, in pursuance of Lord Kerry's motion,* the Manchester Statistical Society (an institution which we strongly recommend to the imitation of the inhabitants of other large towns) appointed a committee of its members to investigate the subject. Accordingly, under their direction, a personal survey of the town has been made by a gentleman possessing all the requisite qualifications for such a task; and finally a report was prepared on the state of the day, Sunday, charity, and infant schools, the number of children attending them, and the nature and value of the instruction which they receive. The results have appeared in a small pamphlet just issued under the direction of the society. It appears that the numbers at present attending the different schools in the borough of Manchester are 43,304, of whom

A 10,108 attend day and evening schools *only*.

B 10,011 attend both day and Sunday schools.

23,185 attend Sunday schools *only*.

43,304

The population of the borough is supposed to be about 200,000. The number of persons receiving instruction of some kind or other is therefore 21.65 per cent. Of those who attend daily schools, the numbers give about 10 per cent. The comparative numbers, however, may be ascertained from the following statement:—

About 33,000 scholars are upon the books of Sunday schools.

About 10,000 are returned as attending both Sunday schools and day or evening schools.

Thus 23,000 scholars receive Sunday school instruction *only*.

About 20,000 are returned as day and evening scholars.

Thus about 43,000 is the total number of children under instruction.

* In the township of Manchester alone, which contains a population of 142,000, there are entirely omitted in these returns, 1 infant school, 10 Sunday schools, and 176 day schools, which existed at the time when these returns were made, and contained 10,011 scholars. False returns were made by one individual of three Sunday schools that never existed at all, and which were stated to contain 1590 scholars; and double returns were made of three other schools, containing 375 scholars, so that the total error in these returns for the township of Manchester alone was 182 schools and 8646 scholars. Besides this, eight dame schools were reported as infant schools. In Chorlton on Medlock, containing a

The investigation was pursued to some extent, for the purpose of ascertaining the ages of the scholars. The average of five Sunday schools gave one-fifth of the numbers above 15, the highest proportion being 27 per cent., and the lowest 13½ per cent. : there will therefore be 6600 Sunday scholars above 15 in the above number of 33,000. About 5400 children are returned as attending the infant and dame schools, of whom the great proportion are under five years of age : the two sums together amount to 12,000. Deducting 10,000 for scholars under five, and above fifteen, which is probably somewhat less than the truth, about 33,000 are left as the number of children between the ages of five and fifteen under course of instruction. The whole number of children, between five and fifteen, in the borough being estimated at 50,000 (or one-fourth of the whole population), it would thus appear that about three-fifths of this number are educated, and that two-fifths are receiving no instruction whatever. The committee, however, are compelled to speak in unfavourable terms of the system of instruction in many cases, and of the want of capacity in the teachers : they consider that too often the benefits arising from attendance at school are only of a negative character, consisting in the children being kept out of 'harm's way,' and from the contagion of evil example. The report contains an account of each description of schools, beginning with

Dame Schools.—Under this head (the Report remarks) are included all those schools in which reading only, and a little sewing, are taught. This is the most numerous class of schools, and they are generally in the most deplorable condition. The greater part of them are kept by females, but some by old men, whose only qualification for this kind of employment seems to be their unfitness for every other. Many of these teachers are engaged at the same time in some other employment, such as shop-keeping, sewing, washing, &c., which renders any regular instruction among their scholars absolutely impossible : indeed, neither parents nor teachers seem to consider this as the principal object in sending the children to these schools, but generally say that they go there in order to be taken care of, and to be out of the way at home. It is stated in a note to this part of the Report, that, notwithstanding this, it is a very common objection made against infant schools, both by parents and teachers (of dame schools), that the children *learn nothing* there. The dames themselves, as may be supposed, regard these schools, and all similar innovations, with a very hostile eye, as encroaching on their province, and likely, before very long, to break up their trade entirely. The dames' schools (the Report continues)

population of 20,500, the returns made to government show too small a number by 40 schools and 837 scholars. One infant school (a private establishment) was not returned at all ; and one Sunday school, which had ceased to exist for more than a year, was returned with 222 scholars. In Hulme township, containing a population of 9600, the returns made to government show too small a number by 14 schools and 864 scholars ; and though there was not one infant school in the township, four dame schools, with 112 scholars, were returned under that title. A Sunday school, with 102 scholars, was also returned, which belongs to another township ; and another, with 400 scholars, was omitted.

are generally found in very dirty, unwholesome rooms—frequently in close, damp cellars, or old dilapidated garrets. In one of these schools eleven children were found in a small room, in which one of the children of the mistress was lying in bed ill of the measles; another child had died in the same room of the same complaint a few days before, and no less than thirty of the usual scholars were then confined at home with the same disease. In another school, all the children, to the number of twenty, were squatted upon the bare floor, there being no benches, chairs, or furniture of any kind in the room. The master said his terms would not yet allow him to provide forms, but he hoped that as his school increased, and his circumstances thereby improved, he should be able some time or other to afford this luxury. In by far the greater number of these schools there were only two or three books among the whole number of scholars. In others there was not one; and the children depended for their instruction on the chance of some one of them bringing a book, or part of one, from home. Books, however, are occasionally provided by the master or mistress, and in this case the supply is somewhat greater, but in almost all cases it is exceedingly deficient. One of the best of this description of schools is kept by a blind man, who hears his scholars their lessons, and explains them with great simplicity; he is, however, liable to interruption in his academic labours, as his wife keeps a mangle, and he is obliged to turn it for her. Occasionally, in some of the more respectable districts, there are still to be found one or two of the old primitive dame schools, kept by a tidy, elderly female, whose school has an appearance of neatness and order, which strongly distinguishes it from the generality of this class of schools. The terms of dame schools vary from 2*d.* to 7*d.* per week, and average 4*d.* The average yearly receipts of each mistress are about 17*l.* 16*s.* The number of children attending these dame schools is 4722; but it appears to the committee that no instruction really deserving the name is received in them; and in reckoning the number of those to be considered as partaking of the advantages of useful education, these children must be left entirely out of the account.

Common Day Schools.—These schools seem to be in rather better condition than those last mentioned, but are still very little fitted to give a really useful education to the children of the poorer classes. The masters generally are in no way qualified for their occupation;*

* The masters themselves have generally a better opinion of their own qualifications. One of them observed, during a visit paid to his school, that there were too many schools to do any good; adding, 'I wish Government would pass a law that nobody but *them as is high larnt* should keep school, and then *we* might stand a chance to do some good.' Most of the masters and mistresses of these schools seemed to be strongly impressed with the superiority of their own plans over those of any other school, and were very little inclined to listen to any suggestions respecting improvements in education that had been made in other places. 'The old road is the best,' they would sometimes say. One master stated that he had adopted a system which he thought would at once supply the great desiderata in education: 'It is simply,' he said, 'in watching the dispositions of the children, and putting

they take little interest in it, and show very little desire to adopt any of the improvements that have elsewhere been made in the modes of instruction. The terms are generally low, and it is no uncommon thing to find the master professing to regulate his exertions by the rate of payment received from his pupils—saying that he gives enough for 4*d.*, 6*d.*, or 8*d.* a-week; but that if the scholars would pay higher, he should teach them more. The payments vary from 3*d.* to 1*s.* 6*d.* per week; the greater number being from 6*d.* to 9*d.*, and the average receipts of the master being 16*s.* or 17*s.* a-week. Though the schools in the accompanying table are classed as girls' and boys' schools, there are very few in which the sexes are entirely divided, almost every boys' school containing some girls, and every girls' school a few boys. They are chiefly the children of mechanics, warehousemen, or small shop-keepers, and learn reading, writing, and arithmetic; and in a very few of the better class of schools, a little grammar and geography. In the great majority of these schools there seems to be a complete want of order and system. In one of these seminaries of learning, where there were about 130 children, the noise and confusion was so great as to render the replies of the master to the inquiries put to him totally inaudible; he made several attempts to obtain silence, but without effect; at length, as a last effort, he ascended his desk, and striking it forcibly with a ruler, said, in a strong Hibernian accent, 'I'll tell you what it is, boys, the first I hear make a noise, I'll call him up, and kill him entirely;' and then perceiving probably on the countenance of his visitor some expression of dismay at this murderous threat, he added quickly, in a more subdued tone, 'almost I will.' His menace produced no more effect than his previous appeals had done. A dead silence succeeded for a minute or two; then the whispering recommenced, and the talking, shuffling of feet, and general disturbance were soon as bad as ever. The master gave up the point, saying, as he descended from his desk, 'You see, the brutes, there's no managing them!' The confusion arising from the want of

them especially to that particular thing which they take to.' In illustration of this system, he called upon a boy about ten years of age, who had taken to Hebrew, and was just beginning to learn it; the master acknowledging that he was learning too, in order to teach his pupil. On being asked whether he did not now and then find a few who did not take to anything, he acknowledged that it was so; and this, he said, was the only weak point in his system, as he found that he should not be able to make much of those children. Another of these masters, who was especially conscious of the superior excellence of his establishment, as soon as he was acquainted with the object of the visit, began to dilate upon the various sciences with which he was familiar; among which he enumerated hydraulics, hydrostatics, geography, geology, etymology, and entomology. It was suggested to him that they had better perhaps take the list of queries in their order. On coming to the subjects taught in the schools, he was asked—'Do you teach reading and writing?'—'Yes!' 'Arithmetic?'—'Yes!' 'Grammar and composition?'—'Certainly!' 'French?'—'Yes!' 'Latin?'—'Yes!' 'Greek?'—'Yes, yes!' 'Geography?'—'Yes,' &c.; and so on, till the list of queries was exhausted, every question being answered in the affirmative. As he concluded, the visitor remarked, 'This is *multum in parvo*, indeed;' to which the master immediately replied, 'Yes; I teach that; you may put that down too.'

order and system, added to the very low qualifications of the master, the number of scholars under the superintendence of *one* teacher, the irregularity of attendance, the great deficiency of books, and the injudicious plans of instruction, or rather the want of any plan, render most of the common day-schools nearly inefficient for any purposes of real education. Religious instruction is seldom attended to, beyond the rehearsal of a catechism; and moral education, real cultivation of mind and improvement of character, are totally neglected. ‘Morals!’ said one master, in answer to the inquiry whether he taught them; ‘Morals! how am I to teach morals to the like of these?’ The girls’ schools are generally in much better condition than the boys’ schools, and have a greater appearance of cleanliness, order, and regularity. This seems to arise in part from the girls being more constantly employed, and the scholars being fewer in number to each teacher.

Superior Private Schools.—Owing to the greater difficulty in conducting the inquiry in this class of schools, little information has been obtained beyond the number of scholars contained in each, and the subjects taught there. The number of children in these schools is 2934. Of the general efficiency of the education provided in them the Committee is not able to offer any opinion, nor did it enter into their plan to report them minutely.

Endowed Schools, Charity Schools, and Schools attached to Public Institutions.—One school, the Free Grammar School, is principally devoted to classical education†. The day-schools attached to the Mechanics’ Institution and the Scotch Church are conducted on the plan of the Edinburgh Sessional School. These two schools, with the one attached to the New Jerusalem Church, appeared to be very effective. Some charities follow Dr. Bell’s monitorial system, and one containing 1040 children is managed upon the Lancasterian system. These classes of schools seem to be generally well conducted, according to the systems they pursue; but it appears to the Committee that some of these systems are capable of much improvement. In the Lancasterian School, for example, and in others where a very large number of scholars are placed under the direction of one master, the plan of instruction pursued is too mechanical, and while the children make considerable proficiency in such

~ * The Committee met with two instances of schools kept by masters of some abilities, but much given to drinking, who had, however, gained such a reputation in their neighbourhood, that, after spending a week or a fortnight in this pastime, they could always fill their school-rooms again as soon as they returned to their post. The children, during the absence of the masters, go to other schools for the week, or play in the streets, or are employed by their parents in running errands, &c. On another occasion, one of these instructors and guardians of the morals of our youth was met issuing from his school-room, at the head of his scholars, to see a *fight* in the neighbourhood; and instead of stopping to reply to any educational queries, only uttered a breathless invitation to come along and see the sport.

† The free grammar school of Manchester is one of those which require an immediate reformation. The funds are above 4000*l.* per annum, and the terms of the foundation, particularly as concerns the education of the poor, are not observed. See ‘Journal of Education,’ No ix. p. 69. (Ed. J. E.)

branches of knowledge as can be taught in this manner, particularly in writing and arithmetic, many other branches of useful knowledge, and still more, the general cultivation of their mental powers, are often totally neglected.

Infant Schools.—There are in the borough only five infant schools, one of which is a private establishment. It is much to be regretted that their number is so small. Their design and management are excellent, and their general utility likely to be very great. In all these points they form a striking contrast to the dame and common day-schools.

Evening Schools.—Of this class of schools there are only 86 in the borough, exclusive of those attached to Sunday schools; but though not numerous, they are generally more effective than other schools, as none attend them who do not wish to learn, and who are not of an age to appreciate the advantages thus afforded them. Some of these scholars are adults, but the great majority are from 14 to 18 years of age. These schools are principally kept by masters of day-schools, and the terms for instruction are often higher than in the day-schools.

Sunday Schools.—There are in the borough 86 Sunday schools, containing 33,196 scholars. In most of them the course of instruction is confined to religion and reading. Ten only teach writing on the Sunday, and three arithmetic; but there are thirty-nine to which evening schools are attached, where both writing and arithmetic are taught. Seventy-five Sunday schools have a library, or clothing, or benefit society connected with them. Though, from the short time necessarily devoted in these schools to the instruction of the children, little positive knowledge, not immediately religious, can be communicated; they must, nevertheless, be regarded as holding a very important place among the existing means of education for the lower classes of the people. The habits of order and regularity which the children acquire—the religious and moral instruction that they receive—the early practice of attendance on divine worship—the friendly communication with those above them, and the kind and social feelings that are cultivated where a large number are drawn together by the same object of innocent pleasure or mutual interest, must, and do secure to those who frequent these schools, some of the happiest and the most valuable results of education. It must be remarked, that many of the most useful teachers in the Sunday schools have themselves been educated there; and in several of the best conducted among the dame and common boys' schools, the masters or mistresses have been originally Sunday scholars.*

Mechanics' Institutes.—The Committee rank these institutions very highly. Few things, they observe, would tend more to diffuse the advantages of education among the people than the extension of similar institutions to other parts of the town, and to other towns throughout the country, more especially if the terms required, the subjects taught, and still more the manner of teaching them, were adapted to interest, attract, and instruct the really labouring classes of the community.

General Results.—The committee conclude their Report with the following summary :—

1. That the number of children returned as attending different schools affords a very imperfect and fallacious criterion of the real state of education in any town or district where such returns are made.

2. That uniting this ground of judgment with actual inspection of the schools, and examination of the nature and general efficiency of the instruction there received, it appears that the means of education at present existing in the borough of Manchester for the lower classes of the people are extremely inadequate, and are in general very little fitted to secure any of the really valuable results of education to the children who attend them.

3. That of the children who attend the dame schools, amounting to 4722, the greater part of whom are under five years of age, the vast majority receive no instruction which is at all deserving of the name, and derive little advantage from their attendance at school but that of being kept out of harm during a few hours of the day.

4. That the thing most to be wished for children of this early age is, that infant schools should gradually supplant the old dame schools, and be established on so large a scale throughout every part of the borough, as to afford accommodation for all the children of an age to receive instruction.

5. That of the children between the ages of five and fifteen, one-third appear to be receiving no instruction in any school.

6. That of the children who attend the common day schools, amounting to nearly 7000, the greatest part receive an extremely poor education, scarcely meriting the name; that this is owing chiefly to the ignorance and incapacity of the masters who conduct them; and that no effectual means can be taken to render these schools efficient until proper seminaries are established for the instruction of the teachers themselves, and till the idea is exploded that the task of education is the only one for which no previous knowledge or qualification is required.

7. That, notwithstanding the short time necessarily devoted to instruction in the Sunday schools, they must, nevertheless, be regarded as forming a most important feature among the means at present existing in Manchester for the education of the lower classes of the people. That the number of children attending these schools is very considerable, being half as many more as those attending all the other schools put together. That, taking into account the miserable state of dame and common day schools, which are attended by two-thirds of all the children of the lower orders who are under a course of instruction, it may be well doubted whether the instruction at Sunday schools, inadequate as it may appear, and as it really is, be not yet the most valuable that at present exists in the borough for the children of the lower classes of the people.

That, until similar inquiries are instituted in other districts, this Report will afford no means of comparing the state of education in

Manchester with its state in other large towns, or in the rural districts; but assuming that Manchester affords a fair average, the state of education in England presents a painful and mortifying contrast to that of some of the countries on the continent, whether we look at the numbers continually in attendance at school, or to the nature and efficiency of the instruction that they there receive. That while in Prussia and several of the German States all children, of every class, between the ages of seven and fourteen, are obliged by law to attend school (and it is shown by statistical returns that they actually do so), it appears by this report, that in Manchester not quite two-thirds of those between the ages of five and fifteen receive even nominal instruction. That while in the countries above referred to, schools are carefully provided in every district, and placed under the superintendence of a master who has himself been educated for the profession, and has not been allowed to assume his office till found by strict examination to be qualified for the duties of it, the education of the lower classes in this country is left, with the few exceptions of public charity schools, in the hands of ignorant and uneducated men, who are often destitute of every qualification for their office, and have undertaken it only because they found this the easiest means of gaining a subsistence, and frequently in consequence of accident or bodily infirmity. That the course of instruction in the above countries is as superior as the mode of it. That every complete elementary school is there required to teach the Christian religion, the German language, the elements of geometry, the general principles of drawing, arithmetic, the elements of natural science, geography, general history (particularly the history of the country), singing, writing, gymnastic exercises, and the simple kinds of manual labour. That no elementary school is considered complete which does not teach all these branches of knowledge, and that a large proportion of those schools actually do so; and that no school is allowed to *exist* which does not teach, in an effectual manner, religion, reading, writing, and singing. That in Manchester, on the other hand, and generally throughout this country, the acquisition of reading, writing, and arithmetic seems to be considered as constituting the finished education of the children of the lower classes of the people. That even these are often very imperfectly taught; and that the real cultivation of the mental powers, the softening the manners, the improvement of the character, instruction on moral and religious subjects, and all the more valuable *objects* of education, are totally neglected and forgotten.

The Appendix to this valuable and interesting Report contains several tables, one of which we subjoin:—

Sunday Schools in the Borough of Manchester.

Religious Denominations.	No. of Schools.	Boys.	Girls.	Total No. of Scholars on the Books.	Average Attendance.	Average Number of Scholars per School.	Proportion of Attendance to the No. on the Books, per Cent.
Church Establishment	25	4,938	5,346	10,284	7,954	318	77.3
Wesleyan Methodist	18	4,209	4,857	9,066	6,558	364	72.3
Catholic	9	1,912	1,968	3,880	3,136	348	80.8
Independent . . .	9	2,070	1,989	4,059	2,864	318	70.5
Methodist New Con.	5	700	753	1,453	1,115	223	76.7
Baptist	3	656	527	1,183	811	270	68.5
General Baptist .	2	192	158	350	228	114	63.2
Primitive Methodist	2	190	211	401	320	160	79.8
Bible Christian .	2	271	130	401	315	157	78.5
Welsh Independent	3	413	366	779	500	166	64.2
Scotch Church . .	1	65	50	115	92	92	80.0
Scotch Seces. Church	1	96	92	188	125	125	66.5
New Jerusalem Church	1	65	85	150	100	100	66.6
Unitarian	1	196	87	283	182	182	64.3
Independent Methodist	1	180	140	320	290	290	90.6
Armenian Methodist	1	37	42	79	70	70	88.6
Welsh Baptist . .	1	18	12	30	25	25	83.7
Welsh Methodist .	1	95	80	175	125	125	71.4
	86	16,303	16,893	33,196	24,810	288	74.7

No. of Schools where the No. on the Books is less than 100	7	No. of Schools where the average Attendance is less than 100	13
Where it exceeds 100	79	Where it exceeds 100	73
Total	86	Total	86

Excepting one School belonging to the Bible Christians, containing 151 scholars, who each pay 1d. per month, the Sunday Schools of Manchester are all free.

LIVERPOOL MECHANICS' INSTITUTE.—On Monday, July 20th, Lord Brougham laid the foundation-stone of the Liverpool Mechanics' Institute, in the presence of a great number of the gentry and merchants, and of many thousand people. He afterwards addressed the assembly in a short speech, in the course of which he dwelt on the advantages resulting from the discoveries of James Watt, a working mechanic, in bringing Manchester within one-fifth part of the distance from Liverpool (for every purpose of intercourse) that it was ten years ago. Lord Brougham was received throughout the day in the most cordial and enthusiastic manner. He subsequently visited the Mechanics' Institutes at Bolton and at Manchester.

YORKSHIRE DEAF AND DUMB INSTITUTION.—On the 24th of June last, the sixth annual meeting of the friends and supporters of this institution was held at Doncaster. The report stated that sixty-three

children were now being educated, and that there were yet fifteen candidates for admission*; that the number of subscribers had increased; and that the prospects of those pupils who had left, or were about to leave, the school, were highly satisfactory. The pupils were presented to the meeting, and were examined by the master, Mr. C. Baker. He began with those who had been admitted during the past year, and proceeded to those who had been for longer periods in the institution. The first two who were brought forward were a boy and a girl, who were examined by a deaf and dumb boy, a teacher, who had been five years at the school. He began by making signs to the children, respecting various subjects, such as an orange, a lady, a man, &c., the names of which they immediately wrote with chalk on the board. After this they wrote the plurals to the same, showing their perfect knowledge of the irregular plurals. They also wrote several articles and adjectives, connected with the substantives: they were afterwards examined in numbers. Two children, who had been in the school two years, were then examined in defining objects, for the purpose of showing the manner in which they were introduced to composition. The teacher having written the name of an object, the children wrote upon the board the nature of such object and its several qualities; Mr. Baker described the manner in which they were introduced to a knowledge of substantives, adjectives, verbs, and the various parts of speech. These pupils were followed by two from the highest class, who were examined in defining and composition, in a more advanced degree. As a specimen we give the word "Water," which, being written on the board, the children wrote immediately after it, "Is a liquid. It is a natural production. It is colourless, purifying, heavy, glassy, transparent, cold, bright, inodorous, tasteless, wholesome, inorganised, reflective, &c. It is used to wash dishes, plates, cans, knives and forks, clothes, &c. It is used to drink. Ice is frozen water. Snow is congealed water. God divided the earth from the water on the third day. The water produces steam when heated. The mists and dews are thin watery vapours." The meanings of the explanations of several words used by the children were asked of them by some gentlemen present, which they replied to at once, in a correct manner. The classes were next examined in geography, the teacher pointing out in a blank map of Great Britain and Ireland several counties, towns, rivers, bays, &c., the names of which the children immediately wrote upon the board, as also the productions, &c., of various places. The next part of the examination was arithmetic: the children performed various sums in notation, addition, subtraction, multiplication, and division, and also the compounds of the same rules. The examination closed with scripture history; the questions being taken from the Old Testament, and from Christ's ministry, and St. Paul's. Several questions were asked by gentlemen present, and the Rev. J. Dobson, of Conisbro', examined them at some length. Almost every question was answered with correctness and precision.

* All these candidates were admitted after the reading of the report had been concluded.

WAKEFIELD PROPRIETARY SCHOOL.—Fifty new scholars were entered on the lists of this establishment at the termination of the Midsummer recess.

TRIBUTE TO A TEACHER.—A telescope of the value of about 100*l.* has recently been presented to T. W. Hill, Esq., of Hazlewood, near Birmingham, father of Messrs. Hill, of Bruce Castle, Tottenham, by a number of his old pupils. The following is a copy of the inscription which it bears :—"To Thomas Wright Hill, Esq., on retiring from his arduous duties as a teacher of youth, this memorial is presented by many of his former pupils, in testimony of their veneration for his unaffected simplicity of character, and their high respect for his abilities as an instructor and his virtues as a man."

EDUCATION FOR THE EMANCIPATED NEGROES.—The Society for the Propagation of the Gospel has originated a subscription for the purpose of supplying school-houses and chapels for the religious instruction of the emancipated negroes in the West Indies. Amongst the subscriptions are 10,000*l.* from the Society for Promoting Christian Knowledge, 5000*l.* from the Society for the Propagation of the Gospel, 5000*l.* from the Society for the Conversion of the Negroes, 1000*l.* from the Standing Committee of the West India Planters and Merchants, 5000*l.* from the Grocers' Company, and sums of 100*l.* each from a great number of noblemen and gentlemen.

SCOTLAND.

THE ABERDEEN SCHOOLS.—The first town council in Aberdeen, chosen by the constituency created by the Scotch Burgh Reform Act, immediately on coming into office appointed a committee of their number to inquire into the state of the public schools in the town. Anxious to advance the interests of education in Aberdeen, this committee did not confine themselves to the four schools in the town which, because they get certain yearly sums from the town funds, and an annual visit from the town magistracy, are qualified with the name of public schools. The committee wisely considering that the state of education in the town ought to influence their report on the public schools, conceived it due to the right discharge of the express duty appointed them, to issue inquiries on the general state of education in Aberdeen, and have published the result of the returns they received in the shape of an appendix affixed to their interim report. From this document we shall compile our account of the state of education in the town generally.

The returns from which this abstract was drawn up were received in December, 1833; and the district which they include embraces the whole of Aberdeen within the boundaries fixed by the Boundary Act. The population of Aberdeen in 1831, was 58,019; and the number of 10*l.* houses was 4166. Aberdeen is divided into eight parishes; the largest, St. Machar's, is split into three divisions, from the largest of which, "the East Section," there have been no returns. The abstract therefore understates the number of schools by at least six

or seven; the number of teachers, by nine or ten; and the number of scholars, by perhaps 300. In consequence of this defect, if we would estimate accurately the numbers educated in Aberdeen in proportion to the population, the number of the inhabitants of the east section of St. Machar's must be subtracted from the estimate of the population.

The number of schools in the abstract of the returns to the committee is 56. The abstract classifies them thus:—Hospitals, 3; free schools, 2; schools at from 1s. 2½d. of school-fees to 2s. per quarter, 4; schools at from 3s. to 5s. per quarter, 30; schools above 5s., and those which have made no return of fees, 17; total, 56. Arranged according to their parishes, the schools are distributed thus:—East parish, 8; West parish, 9; Greyfriars parish, 6; South parish, 5; North parish, 4; St. Clement's parish, 5; parish of St. Machar's, South division, 10; North division, 9; East section, including, we presume, the Spital, the city of Old Aberdeen, and the village of Don, no return. These are the week-day schools. The evening schools, which afford instruction to persons occupied during the day, in which the education of the apprenticed mechanic is often carried forward until he arrives at manhood, and which too often are the only secular schools open to the factory child; of these most useful, though humble and unpensioned schools, there are, in East parish, 5; in West parish, 1; in Greyfriars, 2; in South parish, 1; in St. Machar's parish, South division, 1; North division, 8. North parish, St. Clement's parish, and "the East section" of St. Machar's parish have sent no returns of these schools; and as these districts doubtless contain several, this is another defect in the abstract, and one highly injurious to its utility as an estimate of the state of education in Aberdeen. From personal knowledge, we do not think we shall guess far wrong, if we say these three districts contain at least a dozen evening schools. The total number of evening schools in this abstract is 18. The Sabbath evening schools in East parish are 6; in Greyfriars parish, 5; in South parish, 1; North parish, 2; St. Machar's, South division, 8; North division, 1; Gratis Sabbath Evening School Society, 26; total, 49. On this head also, there is an important deficiency in the returns of the Sunday schools situated in West parish, St. Clement's parish, and "the East section" of St. Machar's parish. This statement of the schools devoted exclusively to religious instruction (and this is the case with all Sabbath schools in Scotland, though of course they indirectly improve their pupils in reading and even writing) is either defective or inaccurate. It is inaccurate if it proceed on the notion that the phrase Sabbath evening schools comprehends all the schools devoted solely to religious education; and it is defective if Sabbath morning schools, and schools for religious instruction held in the mornings, afternoons, and evenings of week-days are omitted.

The faults of this account are considerable. A large part of a parish wanting in the returns of day schools, two parishes and a third of a parish wanting in the returns of evening schools, and two parishes and a third in the account of Sunday schools, besides an

inaccuracy or a defect of considerable moment ; these are errors enough, we hope, to warn any person against forming an account of education in Aberdeen from this report, and to prevent any future reasoner from grounding any argument whatever upon its statements except the proof of its own numerous inaccuracies. But this is not all. The abstract of the Sabbath evening school returns professes to arrange the schools according to the parishes in which they are placed, and yet, to save the trouble of allotting the schools to their respective parishes, 26 schools are classed under the head of the Gratis Sabbath School Society, as if this excellent and benevolent association was a parish. Of course this makes the abstract, as a parochial account of Sunday schools, perfectly worthless. The classification of the day schools is bad. The word hospital is unintelligible as applied to a kind of school ; if it means a school endowed for the maintenance as well as the instruction of the pupils, the word endowed would have had the advantage of being understood, and it would have described the distinction between the schools and an infirmary or an almshouse. The arrangement of the schools according to their fees is very fallacious. A correct classification of schools, a thing undoubtedly of no little difficulty, can never be based on the rate of fees, because fees are common to all kinds of schools, and the highest and the lowest fees may be taken in the same school. The rate of fees may be, however, a useful principle of classification of scholars, since there really is a distinction between the sums paid by the pupils, and it may indicate the expense of different branches of education, and the relative numbers of scholars instructed for certain sums, and thus furnish what is most desirable, the data of an estimate of the expense of education in different places. To tell us the number of scholars in gross, and the highest and the lowest sums between which the fees range, is really to tell us what is exceedingly useless ; a classification of scholars according to the fees paid would have told us this incidentally, and communicated information far more valuable. Such are the defects of this table as to the schools.

The account of teachers is open to all the objections against the account of schools with one or two peculiarly its own. The returns of week-day teachers are 70 ; of week-day evening teachers, 25 ; of Sunday-evening teachers, 145. This account does not distinguish the teachers who teach only during the day, from those who teach evening schools also ; and these two classes are not separated from a class of which Aberdeen has several, who, much to the honor of their benevolence, if not to the benefit of their health, add to their morning and evening toils during the week, the gratuitous communication of religious truths on the Sabbath. If any one were to add together the number of teachers given above as the total number of teachers of all kinds in Aberdeen, we are afraid he would be considerably misled.

We come next to the returns of scholars. The number of scholars in the schools called hospitals is 200 ; in the 2 free schools 180 ; in the schools at 1s. 2½d. per quarter, 965 ; in the schools at

from 3s. to 5s. per quarter, 2502; schools above 5s. per quarter, and those from which no return has been made of fees, 758: total, 4605. From these 4605 must be deducted 210, being, as nearly as can be ascertained, one-half of the number of those attending more schools than one. The total number will then be 4395. The number of scholars in each parish is, in East parish, 539; in West parish, 1409; in Greyfriars' parish, 430; in South parish, 448; in North, 348; in St. Clement's parish, 494; in St. Machar's (south division) 615; St. Machar's (north division) 326; city of Old Aberdeen, or 'East Section' of St. Machar's, no return. The pupils taught the different branches of education are, English, 3673; writing, 2326; arithmetic, 1837; French, 4; Latin, 222; Greek, 62; mathematics, 76; drawing, 16; geography, 343; elocution, 75; sewing, 534; navigation, 15; music, 333. It amuses us to be told that there were only 4 pupils in French in the good town of Aberdeen; we can easily count the names of that number of teachers who taught nothing else but French in December, 1833. According to the statement of the committee, the four teachers had each one pupil. It seems nobody learns Italian or German in the metropolis of the North. Is there a teacher of Spanish in Aberdeen? The number of boys attending day schools is 3183, of females, 1422; which gives a majority of 1761 boys. But the girls are the majority in the Sabbath-schools by 542, the numbers being, males, 1714; females, 2256; in the evening-schools, the numbers of each sex are nearly equal: males, 487; females, 470. The scholars attending Sabbath evening schools are 3970; those attending week-day evening schools are 947.

Such are the *statistics* of education in Aberdeen. In passing from this to the state of the public schools, we observe a singular omission in a report peculiarly, and almost exclusively devoted to the four public schools which have been the petted and patronized favourites of the Town Council, by whom the education committee was appointed, and to whom their report is addressed. The statistics of these schools are not given. The number and functions of their teachers, and the number of their scholars, with all that concerns their education, seem to have escaped the particular notice of the committee, since these important particulars, in a report on these very schools, are lost sight of in the mass of an unintelligible classification. This gives a want of completeness to the report; for the little we have got, however, we ought to be thankful. Persons, however gifted with that wicked sort of second-sight which consists in a shrewd habit of looking behind the curtain on all occasions, and in an utter want of the charity which covers things, may happen to see through the veil of this omission, a bright proof of the benefits conferred on the education of the town by civic grants and town council inspections.

The public schools are visited, and in part supported by the magistrates. There are four of them; the English School in Drum's-lane, St. Clement's School, in Footdee, the School in Correction Wynd, and the Grammar School. The School in Long

Acre, known as Bower's School to all the readers of Moore's 'Life of Byron,' and which used to be visited by the magistrates, ceased to be a public school on the discontinuance of the payment of a salary of 10*l.* 10*s.* to the teacher in 1818.

The English School in Drum's-lane is held in a building which belongs to one of the charitable mortifications, and the rent is paid out of the corporation funds. The teacher, Mr. Alexander Straith, is elected during pleasure, and has a salary of 22*l.* 4*s.* 6*d.* The branches of education in this seminary are 'Reading, spelling, and grammar, and as subsidiary to these, elementary geography, recitation, and composition.' On looking into a dictionary, we find that the learned word subsidiary means, 'helping, aiding, assisting;' but how elementary geography can be made subsidiary to reading, recitation to spelling, and composition to grammar, unless by a ridiculous inversion, is beyond our comprehension. The report compliments the teacher of this school, by stating the great satisfaction his method of teaching gave at the last visitation to the magistrates and visitors; and that the suggestions which he made to the committee for the improvement of his schools are full of that good sense and intelligence which form his character. The situation of the school-house is confined and unwholesome, and it is besides too small for the purposes of the school. 'The teacher states that there is wanted a room for boys, another for girls, and a third for children under five years of age, to be instructed on the principle of an infant school.'

St. Clement's School, in Footdee, is in a building which was rebuilt by the corporation in 1829. In this school are taught reading, writing, and arithmetic. The teacher, Mr. George Bruce, is 'elected during pleasure only;' a phrase used by the committee to signify the liability of the teacher to dismissal at the pleasure of his electors. The teacher has no salary. Up to 1829, the Kirk Session of the parish of St. Nicholas used to allow the teacher of this school 16*l.* 6*s.* 8*d.* a-year, 'when the office of session-clerk was held by him.' He now draws fees, however, from his office of Keeper of the Register of Burials in St. Clement's churchyard. It would appear from the statement of the committee, that the teacher of this school has never had a salary in his scholastic capacity; before 1829 his salary was attached to his office of session-clerk, and it has been derived since from his place as Keeper of the Burial Register of the churchyard of St. Clement's. Instead of suggesting the propriety of leaving this school out of view, in considering the special improvements suitable to the public schools, and including it only in the 'general regulations that may be adopted as to the others,' it might have been well if the committee had taken this special evil into their consideration; for certainly there is no worse plan of paying public servants than that of paying them for the performance of the duties of one office by the fees and emoluments derived from another.

The school-house in Correction Wynd belongs to the town, and is described as 'having two pitiful apartments under one roof.'

There is a school in each apartment ; the one the writing-school, the other the public commercial and mathematical school. There is a teacher elected during pleasure to each school. Before 1818, there was but one to both schools, and the salary allowed him was 25*l.* a-year. The report is silent on the salaries of the present teachers. Mr. James Gordon, the mathematical teacher, has a high reputation as a teacher and a mathematician, in Aberdeen, and the attainments in his classes seem to be considerable.

The Grammar School was built principally by the funds of the corporation. The present state of this important school is not satisfactory to the committee, nor does it, in their opinion, give satisfaction to the public. As the attainment of a bursary for writing Latin at college is the great aim of the scholars, Latin is the exclusive business of the school ; but on this we cannot now enter.

Upon the whole this report is creditable to the committee. The zeal which has prompted their inquiries, and the success by which, as we believe, their efforts will at last be crowned, form an additional argument for placing in the hands of a constituency sufficiently numerous to be identical in interest and feeling with the community, the power of election to such offices as are filled by the members of the Town Council, by whom this useful committee was appointed.

PAROCHIAL SCHOOLS OF ABERDEEN, BANFF, AND MORAY.—In 1828, Mr. Dick, of Finsbury-square, died, leaving property to the amount of 113,147*l.*, the annual produce of which he placed at the disposal of certain trustees, for the ‘maintenance and assistance of the country parochial schoolmasters, as by law established, in the three counties of Aberdeen, Banff, and Moray,’ excluding the royal burghs, with instructions that the said income ‘be applied in such manner as not in any manner to relieve the heritors or other persons from their legal obligations to support parochial schoolmasters, or to diminish the extent of such support,’ &c.; and also to dispose of the said income in such manner as ‘shall seem most likely to encourage active schoolmasters, and gradually to elevate the literary character of the parochial schoolmaster and schools aforesaid.’ Owing to certain law proceedings, this bequest did not come into operation till Martinmas (Nov. 11), 1832, at which time there were accumulations of income to the amount of 17,911*l.* to divide. The trustees, who are eleven writers to the signet in Edinburgh, commenced their labours by procuring returns to be made from every parish in the counties named in the bequests ; similar returns, and of a more detailed and minute description, are in future to be furnished annually by every school desirous of receiving any share of the bequest. The returns for 1832 are printed in a report, by A. Menzies, the clerk to the trustees, which has been recently published. In this report Mr. Menzies discusses the general system of the parochial schools of Scotland, and the advantages which he considers may be produced by a judicious application of the funds, by encouraging and producing a higher order of qualification in the teachers. The reports from the different parishes, parts of which he

quotes in his general report, certainly show many defects in the present system; the principal of which may be stated to be, the want of security as to the due qualification of the teachers; the irregularity of attendance of the pupils; the want of uniformity and sufficient strictness in exacting fees from the scholars; and the inadequacy of the salary assigned by the heritors. To all these points the trustees have given their attention; and in dividing the bequest, these, and a few other points, are all taken into consideration. The returns are for January, 1833, and show that the amount of population to which they are applicable was 217,325. At that time the total number of day-schools of all descriptions within the district was 528, and the scholars attending 20,612.* Of these 137 were parochial schools, and the average number of scholars is 7674 in winter, and 5517 in summer. The total expense of education in the district appears to be as follows:—

1. Parochial Schools.		£.	s.	d.
Amount of salaries paid by heritors	.	3799	15	6 $\frac{3}{4}$
Annual value of accommodation provided or compounded for	.	1011	8	4 $\frac{1}{2}$
Annual amount of school-fees	.	2174	15	4
		6985	19	3 $\frac{1}{4}$

2. Private Schools.		£.	s.	d.
Amount of annual endowments		830	9	7
Annual amount of school-fees returned in 253 cases	.	2440	8	3
138 schools not returned, averaged at the same rate	.	1331	2	6
		4611	0	4

£11,596 19 7 $\frac{1}{4}$

The expense, therefore, for each of the 20,612 scholars is 11s. 3d., and the amount paid by each, as shown by the amount of school-fees paid, 5946l. 6s. 1d., is 5s. 9 $\frac{1}{4}$ d. There are 123 parishes in the district; from 93 the following returns were obtained:

32 parishes contain persons above six years of age unable to read, to the number of . . . 1433

And of these the number under 20 years is . . . 851

61 parishes contain no individual above six years of age unable to read.

33 parishes contain persons above eight years of age unable to write, to the number of . . . 4251

And of these there are under twenty years . . . 1920

25 parishes contain no person above eight years of age unable to write.

* This number of scholars is the number at a particular time: the number passing through the school during the year would probably be one-fourth or one-fifth more. The return, however, is for January, when the attendance is at its highest point; many of the schools in remote districts only supply education during the winter months.

The average amount of the total emoluments of the masters of parochial schools is stated to be 55*l.* 12*s.* 4½*d.*; and the average dividend for the year ending Martinmas, 1833, was 25*l.* 10*s.* 3*d.*, and will in subsequent years be somewhat higher. The rate of fees varies greatly. In one instance the fee for English is 1*s.* per quarter, and in others 4*s.* or 5*s.* per quarter, and for Latin it varies from 2*s.* to 7*s.* 6*d.* per quarter. Nearly all the schoolmasters have attended a university. The following is the classification of the studies of the scholars attending the parochial schools :—

English	.	.	.	.	7400
Writing	.	.	.	.	4105
Arithmetic	.	.	.	.	2422
Mathematics	.	.	.	.	122
Geography	.	.	.	.	175
Greek	.	.	.	.	36
Latin	.	.	.	.	433
French	.	.	.	.	2
English Grammar	.	.	.	.	548

EDINBURGH ACADEMY.—We have in previous numbers noticed this institution, of which the Eleventh Annual Report has been recently published. From this Report we find that the founders and supporters have reason to be satisfied with its success, and particularly with their plan of embracing in the system of education a wider range of subjects than in most similar institutions, and of endeavouring rather to produce a number of scholars well instructed in several useful branches of knowledge, than a few youthful prodigies in one or two. The number of students now amounts to 344. At the last examination, the highest class (fifteen students) were examined on the Cambridge plan: the questions were drawn up by the Rev. C. Terrot; the examiners were Professors Pillans and Dunbar; perfection would have produced 550 marks; two of the lads gained 450, and only two or three under 300. The prizes awarded at the examination were very numerous, and many of the compositions are published with the Report. The course of study is also given. This publicity, we are convinced, is very beneficial; it almost ensures the correction of any great error; it admits and invites hints for improvement; and it enables parents to form a clearer idea of what their sons are actually learning, than the usual vague announcements, that they will be taught 'Latin, Greek, Algebra, Geometry, Geography,' &c. &c. Many ignorant parents are led to imagine that all these things can be taught in the same time as one, and that a few months, or at most a year or two, will make their child a universal scholar.

* The present number has been extended beyond the usual limits, with the object of taking in as much as possible of the useful matter on hand. The article on the Aberdeen Schools, which

was originally intended for the first part of the Journal, has been shortened and inserted here, in order that the substance of it might not be omitted. Several other valuable communications, and the notices of several books and reports, very recently received, are unavoidably curtailed or omitted for want of room.

~~25~~ The two articles on the Kent Grammar Schools, it should be observed, are drawn up from original inquiry. The schools of the county of Kent are included in the Reports of the Commissioners for Charities under the *first* commission. The Cathedral Schools of Canterbury and Rochester are, of course, omitted in the Kent Report, as well as the schools which have special visitors. The Analytical Digest, just printed, contains a tabular view of the Kent schools.

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